

and 09/866132

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 17:36:07 ON 31 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1947 - 31 Jul 2001 VOL 135 ISS 6
FILE LAST UPDATED: 30 Jul 2001 (20010730/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

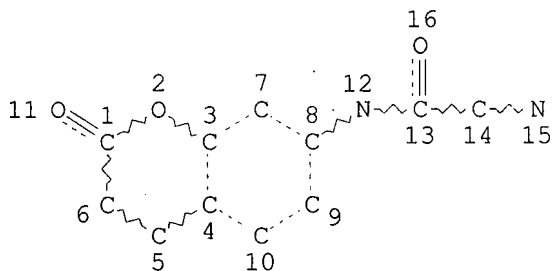
HCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

=>

=>

=> d stat que 114

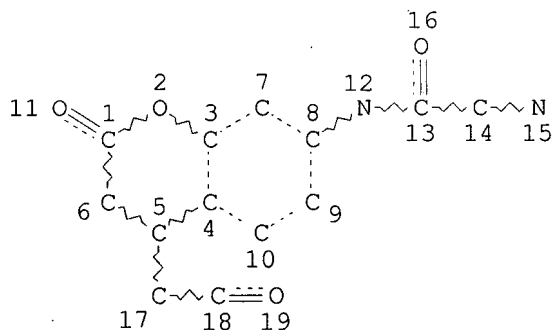
L7 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED.
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L9 1149 SEA FILE=REGISTRY SSS FUL L7
L12 STR



NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

L13 4 SEA FILE=REGISTRY SUB=L9 SSS FUL L12
 L14 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L13

=>

=>

=> d ibib abs hitrn l14 1-2

L14 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:223215 HCAPLUS

DOCUMENT NUMBER: 135:19524

TITLE: Bifunctional coumarin derivatives in solution and solid phase synthesis of fluorogenic enzyme substrates
 AUTHOR(S): Charitos, Christos; Kokotos, George; Tzougraki, Chryssa

CORPORATE SOURCE: Department of Chemistry, University of Athens, Athens, 157 71, Greece

SOURCE: J. Heterocycl. Chem. (2001), 38(1), 153-158
 CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The use of the fluorescent bifunctional compds. 7-amino-4-coumarinylacetic acid, 7-hydroxy-4-coumarinylacetic acid and Et 7-amino-4-coumarinylacetate in soln. and solid phase synthesis of fluorogenic enzyme substrates was examd. The intramolecularly quenched fluorogenic substrate N-(7-amino-4-coumarinyl-acetyl)-L-phenylalanyl-p-nitroanilide, and the fluorogenic one Et 7-(glutaryl-L-phenylalanilamido)-4-coumarinyl-acetate, both suitable for chymotrypsin and/or chymotrypsin like enzymes detn., were prepd. in soln. The substrates 7-oleoyloxy-4-coumarinylacetic acid and 7-palmitoyloxy-4-coumarinylacetic acid, suitable for the enzymic study of lipases, were prepd. by solid phase technique using 2-chloro-chlorotrityl-resin. The study of the fluorescence properties of the above fluorophores and substrates showed that the examd. bifunctional coumarin derivs. are suitable markers for soln. and solid phase synthesis of fluorogenic enzyme substrates.

IT 343310-60-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and fluorescence properties of benzopyranacetic acid derivs.)

IT 343310-59-8

RL: RCT (Reactant)

(prepn. and fluorescence properties of benzopyranacetic acid derivs.)

REFERENCE COUNT: 38

REFERENCE(S): (1) Anderson, G; J Am Chem Soc 1967, V89, P5012
HCAPLUS
(2) Atkins, R; J Org Chem 1978, V43, P1975 HCAPLUS
(3) Barlos, K; Tetrahedron Lett 1989, V30, P3943
HCAPLUS
(5) Besson, T; Heterocycles 1992, V34, P273 HCAPLUS
(6) Chen, Y; Helv Chim Acta 1996, V79, P651 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:494458 HCAPLUS

DOCUMENT NUMBER: 133:248800

TITLE: Rapid and general profiling of protease specificity by
using combinatorial fluorogenic substrate librariesAUTHOR(S): Harris, Jennifer L.; Backes, Bradley J.; Leonetti,
Francesco; Mahrus, Sami; Ellman, Jonathan A.; Craik,
Charles S.CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Program in
Chemistry and Chemical Biology, University of
California, San Francisco, CA, 94143, USASOURCE: Proc. Natl. Acad. Sci. U. S. A. (2000), 97(14),
7754-7759

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A method is presented for the prepn. and use of fluorogenic peptide substrates that allows for the configuration of general substrate libraries to rapidly identify the primary and extended specificity of proteases. The substrates contain the fluorogenic leaving group 7-amino-4-carbamoylmethylcoumarin (ACC). Substrates incorporating the ACC leaving group show kinetic profiles comparable to those with the traditionally used 7-amino-4-methylcoumarin (AMC) leaving group. The bifunctional nature of ACC allows for the efficient prodn. of single substrates and substrate libraries by using 9-fluorenylmethoxycarbonyl (Fmoc)-based solid-phase synthesis techniques. The approx. 3-fold-increased quantum yield of ACC over AMC permits redn. in enzyme and substrate concns. As a consequence, a greater no. of substrates can be tolerated in a single assay, thus enabling an increase in the diversity space of the library. Sol. positional protease substrate libraries of 137,180 and 6859 members, possessing amino acid diversity at the P4-P3-P2-P1 and P4-P3-P2 positions, resp., were constructed. Employing this screening method, we profiled the substrate specificities of a diverse array of proteases, including the serine proteases thrombin, plasmin, factor Xa, urokinase-type plasminogen activator, tissue plasminogen activator, granzyme B, trypsin, chymotrypsin, human neutrophil elastase, and the cysteine proteases papain and cruzain. The resulting profiles create a pharmacophoric portrayal of the proteases to aid in the design of selective substrates and potent inhibitors.

IT 296236-25-4P 296236-27-6P

RL: BPR (Biological process); SPN (Synthetic preparation); BIOL

(Biological study); PREP (Preparation); PROC (Process)

(rapid and general profiling of protease specificity by using
combinatorial fluorogenic substrate libraries)

REFERENCE COUNT: 30

REFERENCE(S): (1) Backes, B; J Org Chem 1999, V64, P2322 HCAPLUS
(2) Backes, B; Nat Biotechnol 2000, V18, P187 HCAPLUS
(4) Besson, T; Heterocycles 1992, V34, P273 HCAPLUS
(5) Brandstetter, H; J Biol Chem 1996, V271, P29988
HCAPLUS
(7) Carpino, L; J Org Chem 1996, V61, P2460 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

Applicants

=>

=>

=> fil caold

FILE 'CAOLD' ENTERED AT 17:36:36 ON 31 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=>

=>

=> s l13

L15 0 L13

=>

=>

=> fil reg

FILE 'REGISTRY' ENTERED AT 17:36:45 ON 31 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 30 JUL 2001 HIGHEST RN 349531-86-8
DICTIONARY FILE UPDATES: 30 JUL 2001 HIGHEST RN 349531-86-8

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT for details.

=>

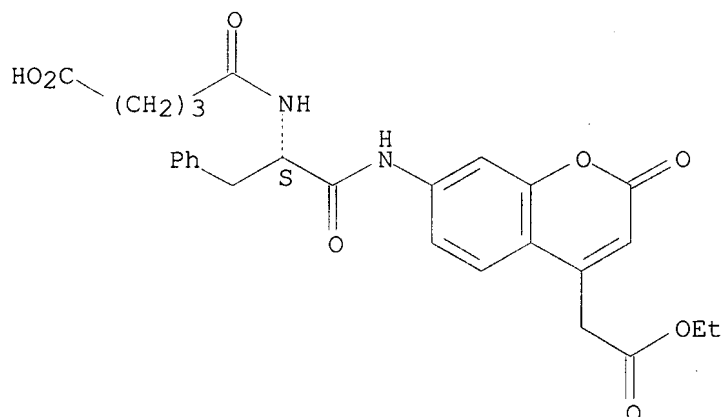
=>

=> d ide can l13 tot

L13 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2001 ACS
RN 343310-60-1 REGISTRY

CN 2H-1-Benzopyran-4-acetic acid, 7-[[[(2S)-2-[(4-carboxy-1-oxobutyl)amino]-1-oxo-3-phenylpropyl]amino]-2-oxo-, .alpha.-ethyl ester (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C27 H28 N2 O8
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

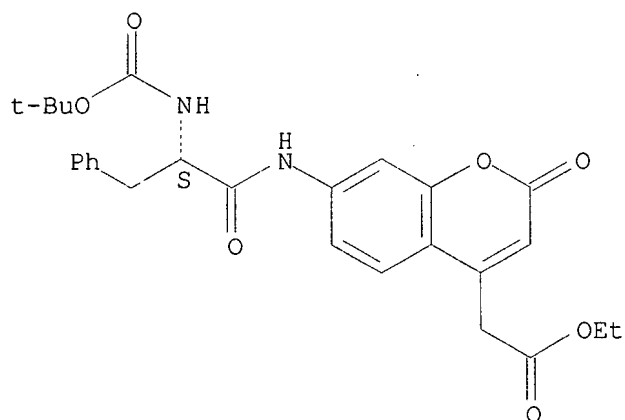


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:19524

L13 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2001 ACS
 RN 343310-59-8 REGISTRY
 CN 2H-1-Benzopyran-4-acetic acid, 7-[[[(2S)-2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C27 H30 N2 O7
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

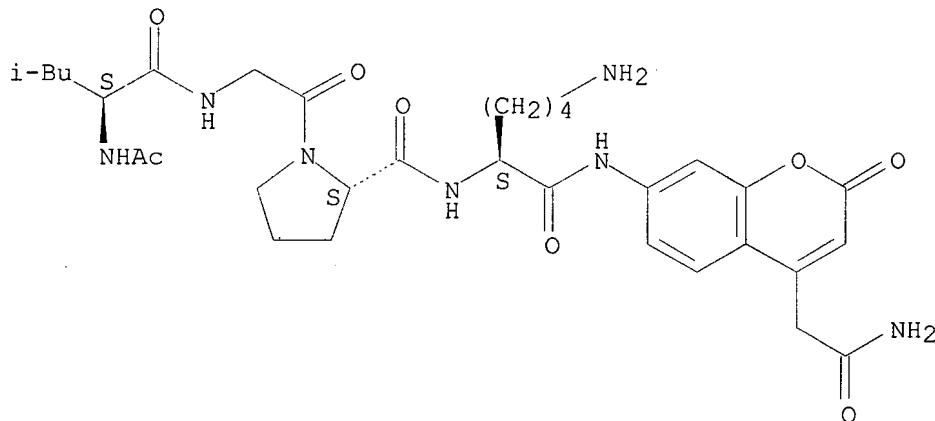


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:19524

L13 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2001 ACS
 RN 296236-27-6 REGISTRY
 CN L-Lysinamide, N-acetyl-L-leucylglycyl-L-prolyl-N-[4-(2-amino-2-oxoethyl)-2-oxo-2H-1-benzopyran-7-yl]- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C32 H45 N7 O8
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

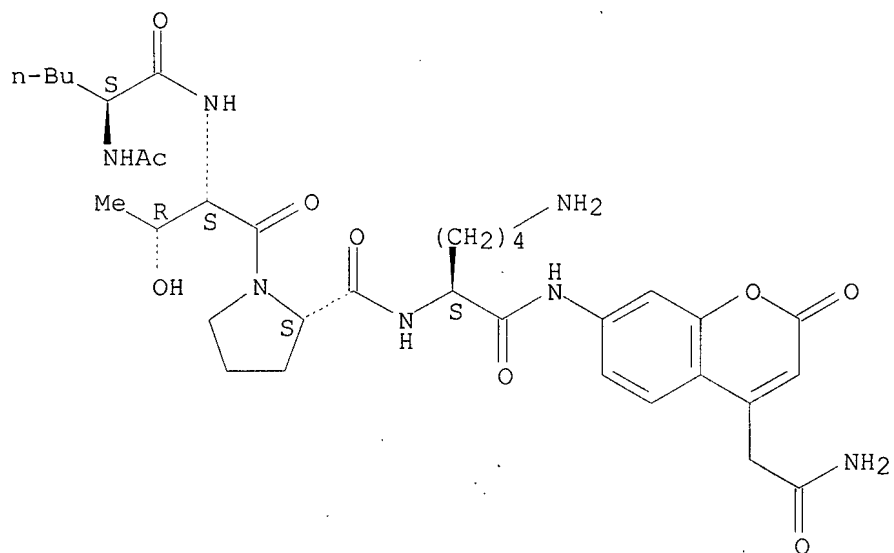


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:248800

L13 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2001 ACS
 RN 296236-25-4 REGISTRY
 CN L-Lysinamide, N-acetyl-L-norleucyl-L-threonyl-L-prolyl-N-[4-(2-amino-2-oxoethyl)-2-oxo-2H-1-benzopyran-7-yl]- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C34 H49 N7 O9
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



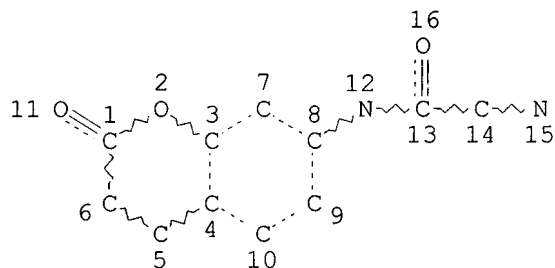
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:248800

09/866132

=> d stat que 127

L7 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

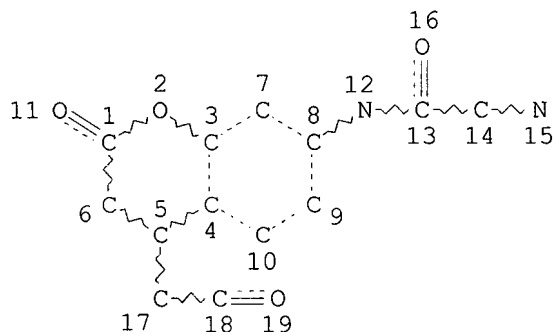
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L9 1149 SEA FILE=REGISTRY SSS FUL L7

L12 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

L13 4 SEA FILE=REGISTRY SUB=L9 SSS FUL L12

L20 1145 SEA FILE=REGISTRY ABB=ON PLU=ON L9 NOT L13

L21 709 SEA FILE=HCAPLUS ABB=ON PLU=ON L20

L24 67 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 (L) (PROTEASE OR SOLID(W) SUP
PORT)

L25 49 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 NOT (2001 OR 2000)/PY

L27 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND FLUOROG?

=>

=>

=> d ibib abs hitrn 127

L27 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:197496 HCAPLUS
 DOCUMENT NUMBER: 131:29254
 TITLE: Interdependency of Sequence and Positional Specificities for Cysteine Proteases of the Papain Family
 AUTHOR(S): Naegler, Dorit K.; Tam, Wendy; Storer, Andrew C.; Krupa, Joanne C.; Mort, John S.; Menard, Robert
 CORPORATE SOURCE: Biotechnology Research Institute, National Research Council of Canada, Montreal, PQ, H4P2R2, Can.
 SOURCE: Biochemistry (1999), 38(15), 4868-4874
 CODEN: BICHAW; ISSN: 0006-2960
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The specificity of cysteine proteases is characterized by the nature of the amino acid sequence recognized by the enzymes (sequence specificity) as well as by the position of the scissile peptide bond (positional specificity, i.e., endopeptidase, aminopeptidase, or carboxypeptidase). In this paper, the interdependency of sequence and positional specificities for selected members of this class of enzymes has been investigated using **fluorogenic** substrates where both the position of the cleavable peptide bond and the nature of the sequence of residues in P2-P1 are varied. The results show that cathepsins K and L and papain, typically considered to act strictly as endopeptidases, can also display dipeptidyl carboxypeptidase activity against the substrate Abz-FRF(4NO2)A and dipeptidyl aminopeptidase activity against FR-MCA. In some cases the activity is even equal to or greater than that obsd. with cathepsin B and DPP-I (dipeptidyl peptidase I), which have been characterized previously as exopeptidases. In contrast, the exopeptidase activities of cathepsins K and L and papain are extremely low when the P2-P1 residues are A-A, indicating that, as obsd. for the normal endopeptidase activity, the exopeptidase activities rely heavily on interactions in subsite S2 (and possibly S1). However, cathepsin B and DPP-I are able to hydrolyze substrates through the exopeptidase route even in absence of preferred interactions in subsites S2 and S1. This is attributed to the presence in cathepsin B and DPP-I of specific structural elements which serve as an anchor for the C- or N-terminus of a substrate, thereby allowing favorable enzyme-substrate interaction independently of the P2-P1 sequence. As a consequence, the nature of the residue at position P2 of a substrate, which is usually the main factor detg. the specificity for cysteine proteases of the papain family, does not have the same contribution for the exopeptidase activities of cathepsin B and DPP-I.

IT 65147-22-0 65147-23-1 227029-50-7
 227029-51-8

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (interdependency of sequence and positional specificities for cysteine
proteases of papain family)

REFERENCE COUNT: 34

REFERENCE(S): (1) Barrett, A; Biochem J 1980, V187, P909 HCAPLUS
 (2) Barrett, A; Biochem J 1982, V201, P189 HCAPLUS
 (3) Barrett, A; Methods Enzymol 1981, V80, P535
 HCAPLUS
 (4) Barrett, A; Methods Enzymol 1981, V80, P535
 HCAPLUS
 (5) Berger, A; Philos Trans R Soc London Ser B 1970,
 V257, P249 HCAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitrn 127 2-10

L27 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:615290 HCAPLUS

DOCUMENT NUMBER: 127:316178
 TITLE: Major Increase in Endopeptidase Activity of Human Cathepsin B upon Removal of Occluding Loop Contacts
 AUTHOR(S): Naegler, Dorit K.; Storer, Andrew C.; Portaro, Fernanda C. V.; Carmona, Euridice; Juliano, Luiz; Menard, Robert
 CORPORATE SOURCE: Biotechnology Research Institute, National Research Council of Canada, Montreal, PQ, H4P2R2, Can.
 SOURCE: Biochemistry (1997), 36(41), 12608-12615
 CODEN: BICHAW; ISSN: 0006-2960
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The main feature distinguishing cathepsin B from other cysteine proteases of the papain family is the presence of a large insertion loop, termed the occluding loop, which occupies the S' subsites of the enzyme. The loop is held in place mainly by two contacts with the rest of the enzyme, involving residues His110 and Arg116 on the loop that forms salt bridges with Asp22 and Asp224, resp. The influence of this loop on the endopeptidase activity of cathepsin B has been investigated using site-directed mutagenesis and internally quenched **fluorogenic** (IQF) substrates. Wild-type cathepsin B displays poor activity against the substrates Abz-AFRSAAQ-EDDnp and Abz-QVVAGA-EDDnp as compared to cathepsin L and papain. Appreciable increases in kcat/Km were obsd. for cathepsin B contg. the single mutations D22A, H110A, R116A, and D224A. The highest activity however is obsd. for mutants where both loop to enzyme contacts are disrupted. For the triple-mutant D22A/H110A/R116A, an optimum kcat/Km value of 12 .times. 10⁵ M⁻¹ s⁻¹ was obtained for hydrolysis of Abz-AFRSAAQ-EDDnp, which corresponds to a 600-fold increase relative to wild-type cathepsin B and approaches the level of activity obsd. with cathepsin L or papain. By comparison, the mutations have little effect on the hydrolysis of Cbz-FR-MCA. The influence of the mutations on the pH dependency of activity also indicates that the complexity of pH activity profiles normally obsd. for cathepsin B is related to the presence of the occluding loop. The major increase in endopeptidase activity is attributed to an increase in loop "flexibility" and suggests that the occluding loop might move when an endopeptidase substrate binds to the enzyme. The possible contribution of these interactions in regulating endopeptidase activity and the implications for cathepsin B activity in physiol. or pathol. conditions are discussed.

IT **65147-22-0**
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (major increase in endopeptidase activity of human cathepsin B upon removal of occluding loop contacts in relation to structure-activity of papain family of cysteine **proteases**)

L27 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:294705 HCAPLUS
 DOCUMENT NUMBER: 127:30762
 TITLE: Characterization of the substrate specificity of the major cysteine protease (cruzipain) from Trypanosoma cruzi using a portion-mixing combinatorial library and **fluorogenic** peptides
 AUTHOR(S): Del Nery, Elaine; Juliano, Maria A.; Meldal, Morten; Svendsen, Ib; Scharfstein, Julio; Walmsley, Adrian; Juliano, Luiz
 CORPORATE SOURCE: Dep. Biophysics, Escola Paulista Medicina, Sao Paulo, 04044-020, Brazil
 SOURCE: Biochem. J. (1997), 323(2), 427-433
 CODEN: BIJOAK; ISSN: 0264-6021
 PUBLISHER: Portland Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The substrate specificity of the major cysteinyl proteinase of the parasitic protozoan Trypanosoma cruzi (cruzipain) was investigated, by combinatorial replacement of amino acid residues at positions P5-P'5,

using a fluorescent quenched solid-phase library assay. Pos. charged residues appear to be a general preference in the P5-P3 and the P'5P'3 positions, while a hydrophobic residue was always required at the P2 position. A broad range of amino acids could be accepted at the P'1 position. A clear difference in terms of specificity between cruzipain and human cathepsin L was obsd. for the accommodation of Pro the P2 position. The P1 specificity was investigated by a more detailed enzyme kinetic anal. using peptidyl-MCA (where MCA is methylcoumarin amide) and Abz-peptidyl-EDDnp [where Abz is o-aminobenzoic acid and EDDnp is N-(2,4-dinitrophenyl)ethylenediamine] as substrates, and the results were compared with those obtained using human cathepsin L. Cruzipain showed a clear preference for benzyl-Cys or Arg at the P1 position. Human cathepsin L presented similar behavior to that of cruzipain for the hydrolysis of the .epsilonion.-NH2-Cap-Leu-Xaa-MCA (where Cap is .epsilonion.-aminocaproyl) and Abz-Lys-Leu-Xaa-Phe-Ser-Lys-Gln-EDDnp series, whereas the mammalian enzyme was able to tolerate large P1 residues, such as phenylalanine, better than cruzipain in the latter series.

IT 178483-21-1 178483-22-2 178483-23-3
178483-24-4 178483-25-5 178483-26-6
178483-27-7

RL: BPR (Biological process); PRP (Properties); BIOL (Biological study);
PROC (Process)

(characterization of substrate specificity of major cysteine
protease (cruzipain) from Trypanosoma cruzi using a
portion-mixing combinatorial library and **fluorogenic**
peptides)

L27 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:655578 HCAPLUS

DOCUMENT NUMBER: 125:321395

TITLE: Substrate specificity of ascidian sperm trypsin-like
proteases, spermosin and acrosin

AUTHOR(S): Sawada, Hitoshi; Someno, Tetsuya

CORPORATE SOURCE: Dep. Life Sci., Tokyo Inst. Technol., Yokohama, Japan

SOURCE: Mol. Reprod. Dev. (1996), 45(2), 240-243

CODEN: MREDEE; ISSN: 1040-452X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To investigate systematically the substrate or subsite specificity of two sperm proteases, acrosin and spermosin (a novel trypsin-like protease) of the ascidian, Halocynthia roretzi, the effects of peptidyl-argininals on the purified enzymes as well as on fertilization were examd. Among four benzyloxycarbonyl (Z)-Leu-X-argininals (X = Pro, Leu, Ser, and Gly), Z-Leu-Pro-argininal showed the strongest inhibition toward the spermosin activity. On the P3 site specificity, Val-Pro-argininal derivs. showed a stronger inhibition than a Leu-Pro-argininal deriv., suggesting the preference of Val rather than Leu residue at the P3 position. Similar results were obtained by analyzing the hydrolyzing activity of the **fluorogenic** peptide substrates: it hydrolyzed Boc-Val-Pro-Arg-4-methylcoumaryl-7-amide (MCA) most efficiently, and Boc-Asp(O-benzyl)-Pro-Arg-MCA was the next best substrate, but Gly-Pro-Arg (or Lys)-MCAs were hardly hydrolyzed. Acrosin was found to prefer Leu or Pro residue rather than Gly or Ser residue at the P2 position as revealed by comparing the Ki values of peptidyl-argininals. Detailed kinetic anal. on the inhibitory abilities of peptidyl-argininals toward the purified enzymes and the ascidian fertilization suggested that both acrosin and spermosin are involved in ascidian fertilization.

IT 65147-04-8 113866-00-5 117961-27-0
118850-78-5 128202-25-5

RL: BPR (Biological process); PRP (Properties); BIOL (Biological study);
PROC (Process)

(substrate specificity of ascidian sperm trypsin-like **proteases**
, spermosin and acrosin)

L27 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:1003377 HCAPLUS

DOCUMENT NUMBER: 124:80395
 TITLE: Human lymphoblast and erythrocyte multicatalytic proteases: differential peptidase activities and responses to the 11S regulator
 AUTHOR(S): Ustrell, V.; Realini, C.; Pratt, G.; Rechsteiner, M.
 CORPORATE SOURCE: Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT, 84132, USA
 SOURCE: FEBS Lett. (1995), 376(3), 155-8
 CODEN: FEBLAL; ISSN: 0014-5793
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The multicatalytic protease (MCP) or 20S proteasome was purified from human red blood cells and two lymphoblastoid cell lines, 721.45 which constitutively expresses protease subunits LMP2 and LMP7, and 721.174 in which genes for these subunits are deleted. Each MCP was assayed using a series of **fluorogenic** peptides. The hydrophobic peptides gGGF-MCA, sRPFHLLVY-MCA and sLY-MCA were particularly good substrates for 721.45 MCP as compared to the enzyme from 721.174 and red blood cells. In addn., hydrolysis of gGGF-MCA and sLY-MCA was activated by human red blood cell and recombinant regulators to a greater extent using MCP from 721.45 lymphoblasts. Thus, LMP2/LMP7 and regulator appear to act synergistically in the enhanced degrdn. of gGGF-MCA and sLY-MCA by the multicatalytic protease.

IT 65147-21-9 70996-06-4 71973-79-0
 73554-84-4 73554-90-2 73554-95-7
 76524-84-0 94367-20-1 94367-21-2
 109358-48-7
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (role of 11S, LMP2, and LMP7 proteins in regulation of multicatalytic **proteases** of human lymphoblasts and erythrocytes)

L27 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:530009 HCAPLUS
 DOCUMENT NUMBER: 113:130009
 TITLE: Protease activity in gingival crevicular fluid from discrete periodontal sites in humans with periodontitis or gingivitis
 AUTHOR(S): Beighton, D.; Radford, J. R.; Naylor, M. N.
 CORPORATE SOURCE: Med. Coll., London Hosp., London, E1 2AD, UK
 SOURCE: Arch. Oral Biol. (1990), 35(5), 329-35
 CODEN: AOBIAR; ISSN: 0003-9969
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Sensitive **fluorogenic** assays were used to compare the protease activities of fluid collected from 8 discrete periodontal sites in each of 21 adult patients with gingivitis and 22 with periodontitis. The degrdn. of N-carbobenzoxy-glycyl-glycyl-arginine-AMC (where AMC = 7-amido-4-methylcoumarin), L-arginine-AMC, glycyl-proline-AMC, L-leucine-AMC, N-.alpha.-benzoyl-L-arginine-AMC, N-[p-toluenesulfonyl]-glycyl-prolyl-arginine-AMC, N-tert-butoxycarbonyl-leucyl-seryl-threonyl-arginine-AMC, N-tert-butoxycarbonyl-isoleucyl-glutamyl-glycyl-arginine-AMC, and N-tert-butoxycarbonyl-valyl-leucyl-lysine-AMC was greater by fluid from the periodontitis group. The specific rates of degrdn. of L-arginine-AMC, glycyl-proline-AMC, N-.alpha.-benzoyl-L-arginine-AMC, and N-[p-toluenesulfonyl]-glycyl-prolyl-arginine-AMC were greater in that group, indicating that the compn. of their gingival crevicular fluid was different from that of the gingivitis group. Discriminant anal. of the substrate hydrolysis data alone correctly identified 77.6% of sites with sensitivity and specificity values of 73.3 and 82.1%, resp. The predictive value of these assays requires further investigation, but it is possible that they will prove useful for monitoring the success of periodontal treatment.

IT 65147-06-0 65286-27-3 65452-02-0
 66216-78-2 66447-31-2 73207-91-7
 73554-84-4 73554-93-5 117961-27-0
 RL: BIOL (Biological study)

(as **protease** substrate, from gingival fluid of humans,
specificity of)

L27 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:473561 HCAPLUS
DOCUMENT NUMBER: 113:73561
TITLE: Substrate specificity and inhibition of *Pseudomonas aeruginosa* alkaline protease
AUTHOR(S): Morimoto, Takashi; Nishino, Norikazu; Fujimoto, Tsutomu; Yamamoto, Tetsuro
CORPORATE SOURCE: Dep. Appl. Chem., Kyushu Inst. Technol., Kitakyushu, 804, Japan
SOURCE: Pept. Chem. (1990), Volume Date 1989, 27th, 387-90
CODEN: PECHDP; ISSN: 0388-3698
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The alk. proteinase of *P. aeruginosa* was identified as a C-type metalloproteinase similar to the 56K proteinase of *Serratia* on the basis of specificity studies with **fluorogenic** peptide substrates and peptidylmercaptoanilide inhibitors kinetic parameters (K_m , k_{cat} , k_{cat}/K_m , and K_i values) are reported and structure-activity relations of the substrates and inhibitors are discussed.

IT 65147-22-0

RL: RCT (Reactant)
(reaction of, with alk. **protease** of *Pseudomonas aeruginosa*,
kinetics of, structure in relation to)

L27 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:437409 HCAPLUS
DOCUMENT NUMBER: 113:37409
TITLE: Device for enhancing fluorescence and enzymic hydrolysis kinetics, and methods of using the device for microorganism identification
INVENTOR(S): Sussman, Mark L.; Wilson, Stephen G.; Tice, Gregory
PATENT ASSIGNEE(S): Becton, Dickinson and Co., USA
SOURCE: Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 347771	A2	19891227	EP 1989-110958	19890616
EP 347771	A3	19910327		
EP 347771	B1	19960814		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AU 8933244	A1	19891221	AU 1989-33244	19890420
AU 616957	B2	19911114		
AT 141413	E	19960815	AT 1989-110958	19890616
ES 2090026	T3	19961016	ES 1989-110958	19890616
FI 8902994	A	19891221	FI 1989-2994	19890619
DK 8903046	A	19891221	DK 1989-3046	19890620
JP 02046280	A2	19900215	JP 1989-158138	19890620
			US 1988-209677	19880620

PRIORITY APPLN. INFO.:

AB A carrier having at least one kinetics- and fluorescence-enhancing support and a dry substance selected from **fluorogenic** substrates, B-methylumbelliferone, 7-amino-4-Me coumarin, B-naphthylamine, fluorescein, and resorufin deposited on the support demonstrates substantial enhancement of hydrolysis kinetics and fluorescence over pure liq. systems. When the device has a plurality of supports and the supports have different **fluorogenic** substrates, an enzyme rate-of-reaction profile representative of a microorganism in the suspension can be detd. and used to identify the organism. The device can also be used to characterize enzymes expressed by other biol. specimens.

Methods using the above device are described. Bacterial enzyme rate anal. was performed with the device of the invention for 25 of the bacteria most commonly isolated from blood culture bottles. Forty-six different **fluorogenic** substrates were used in the test. The data generated were analyzed by nearest neighbor anal. using unit sphere projection. Each strain tested identified to another strain of the same species as its nearest neighbor for 95% of the tests. The device of the invention was also used to test for e.g. microorganisms expressing .beta.-lactamase activity.

IT 65286-27-3 77471-42-2 78682-66-3
94099-57-7 94367-34-7 98516-73-5
98516-74-6 98516-75-7 98516-76-8

RL: ANST (Analytical study)

(microorganisms nearest-neighbor anal. identification with, on **solid support**, enzyme kinetics and fluorescence enhancement in relation to)

L27 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1989:232106 HCAPLUS
DOCUMENT NUMBER: 110:232106
TITLE: Preparation and testing of tripeptides as serine protease substrates
INVENTOR(S): Gustavsson, Stig I.; Arielly, Salo
PATENT ASSIGNEE(S): KabiVitrum AB, Swed.
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4797472	A	19890110	US 1987-27969	19870319
PRIORITY APPLN. INFO.:			SE 1986-1329	19860321
OTHER SOURCE(S):		MARPAT 110:232106		

AB R1-X-D-Arg-A-Arg-NHR2 [I; R1 = H, (carboxyl-substituted) alkyl, (substituted) Ph, phenylalkyl, .alpha.- or .beta.-naphthyl; R2 = aryl, heterocyclyl; R2NH is a group enzymically hydrolyzable from the tripeptide; A = Gly, Sar; X = CO2, CO, SO2, bond], useful for detn. of serine proteases, were prepd. Z-D-Arg-Gly-Arg-pNA (pNA = p-nitroaniline), prepd. by the soln. phase method, inhibited Factor Xa with Kn = 0.11 nmol/L and Kcat = 250 sec-1.

IT 113712-08-6

RL: RCT (Reactant)

(peptide coupling of, in prepn. of serine **protease** substrate)

IT 113711-87-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as serine **protease** substrate)

L27 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1986:605177 HCAPLUS
DOCUMENT NUMBER: 105:205177
TITLE: A novel serine protease (IRCM-serine protease 1) from porcine neurointermediate and anterior pituitary lobes. Isolation, polypeptide chain structure, inhibitor sensitivity, and substrate specificity with **fluorogenic** peptide substrates
AUTHOR(S): Cromlish, James A.; Seidah, Nabil G.; Chretien, Michel
CORPORATE SOURCE: Lab. Biochem. Neuroendocrinol., Clin. Res. Inst. Montreal, Montreal, PQ, H2W 1R7, Can.
SOURCE: J. Biol. Chem. (1986), 261(23), 10850-8
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A novel serine protease, designated IRCM-serine protease 1, was purified

from both porcine neurointermediate and anterior pituitary lobes. The enzyme was inhibited by soybean trypsin inhibitor, pancreatic trypsin inhibitor, benzamidine, phenylmethylsulfonyl fluoride, and SH-group reagents, including HgCl₂, p-chloromercuribenzoate, and 5,5'-dithiobis-(2-nitrobenzoic acid), and was resistant to lima bean trypsin inhibitor, .alpha.2-macroglobulin, .alpha.1-antitrypsin, and Cl-esterase inhibitor. IRCM-serine protease 1 displayed trypsin-like specificity toward a no. of tripeptide coumarin-contg. substrates, with kcat/Km values of 104-106M⁻¹ s⁻¹ (kcat = catalytic const.). The best substrate was benzyloxycarbonyl-L-Ala-L-Lys-L-Arg-4-methylcoumarin-7-amide with a kcat/Km value of 2.27 .times. 106M⁻¹ s⁻¹. IRCM-serine protease 1 (mol. wt. = 169,000-190,000) detd. by gradient gel electrophoresis and gel filtration, resp., appeared to be a homologous dimer. The monomeric subunits of the enzyme were composed of a 38,000-dalton polypeptide chain which was modifiable by 125I-D-Tyr-Glu-Phe-Lys-Arg-CH₂Cl, disulfide-linked to another polypeptide, resulting in a subunit mol. wt. of 88,000.

IT 90468-18-1 104881-68-7 104881-69-8
104881-70-1 104881-71-2 104881-72-3

RL: RCT (Reactant)

(reaction of, with IRCM-serine **protease** 1 of pituitary gland,
kinetics of)

=> select hitrn l27 1-10

'HITRN' IS NOT A VALID FIELD CODE FOR FILE 'HCAPLUS'

ENTER DISPLAY CODE (TI) OR ?: end

=> select hit rn l27 1-10

E1 THROUGH E49 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 17:44:18 ON 31 JUL 2001

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2001 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 30 JUL 2001 HIGHEST RN 349531-86-8

DICTIONARY FILE UPDATES: 30 JUL 2001 HIGHEST RN 349531-86-8

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
for details.

=>

=>

=> d his l28

(FILE 'HCAPLUS' ENTERED AT 17:39:28 ON 31 JUL 2001)
SELECT HIT RN L27 1-10

L28 FILE 'REGISTRY' ENTERED AT 17:44:18 ON 31 JUL 2001
49 S E1-E49

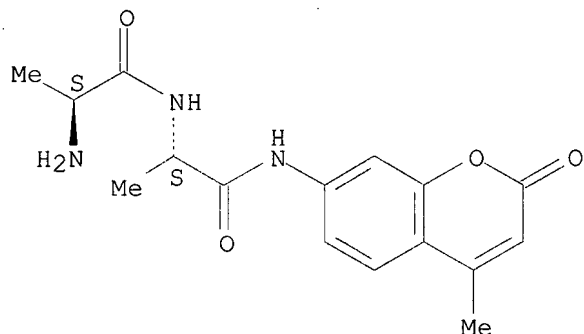
=>

=>

=> d ide can 128 1-49

L28 ANSWER 1 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN 227029-51-8 REGISTRY
 CN L-Alaninamide, L-alanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI)
 (CA INDEX NAME)
 FS STEREOSEARCH
 MF C16 H19 N3 O4
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

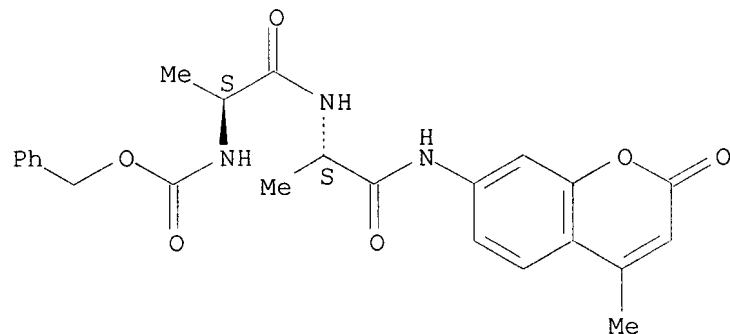


1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:29254

L28 ANSWER 2 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN 227029-50-7 REGISTRY
 CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-alanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C24 H25 N3 O6
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



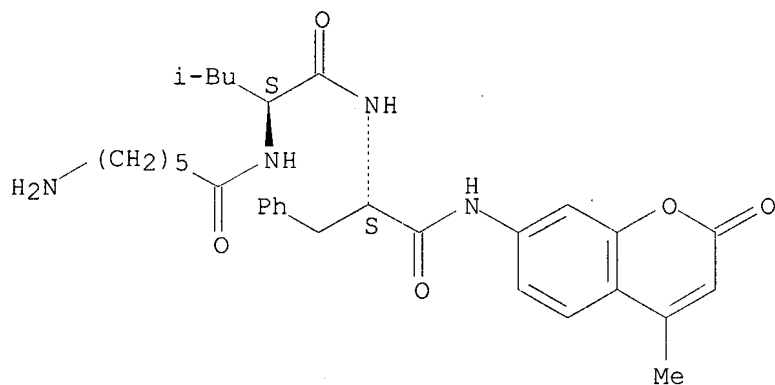
1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:29254

L28 ANSWER 3 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-27-7** REGISTRY
 CN L-Phenylalaninamide, N-(6-amino-1-oxohexyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C31 H40 N4 O5
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

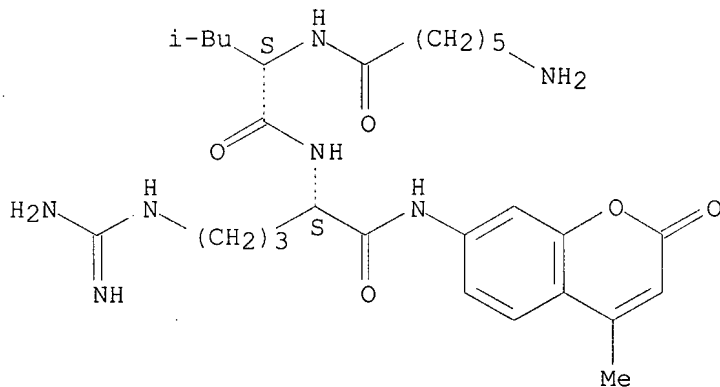
REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

L28 ANSWER 4 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-26-6** REGISTRY
 CN L-Argininamide, N-(6-amino-1-oxohexyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C28 H43 N7 O5
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

L28 ANSWER 5 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-25-5** REGISTRY

CN Glycinamide, N-(6-amino-1-oxohexyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

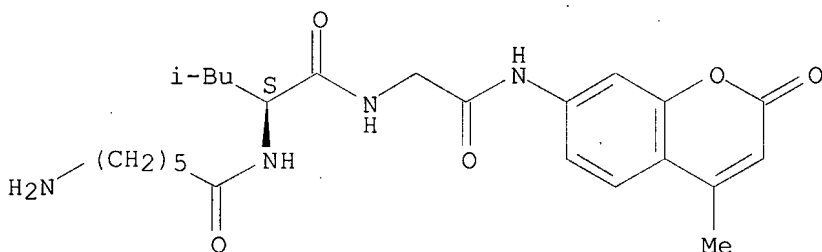
FS STEREOSEARCH

MF C24 H34 N4 O5

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

L28 ANSWER 6 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-24-4** REGISTRY

CN L-Tyrosinamide, N-(6-amino-1-oxohexyl)-L-leucyl-O-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

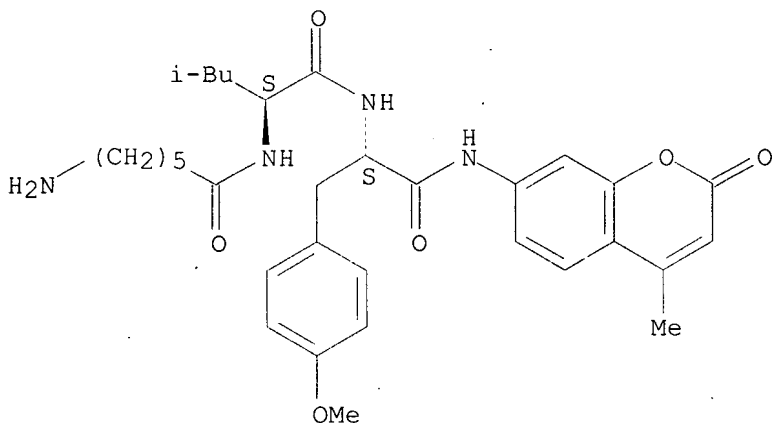
FS STEREOSEARCH

MF C32 H42 N4 O6

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

L28 ANSWER 7 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-23-3** REGISTRY

CN L-Threoninamide, N-(6-amino-1-oxohexyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

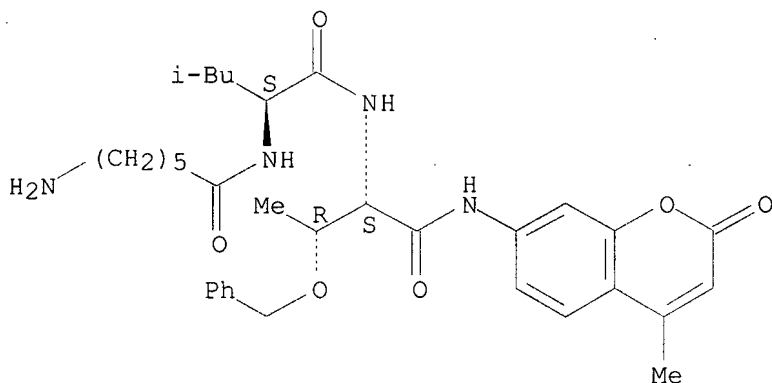
FS STEREOSEARCH

MF C33 H44 N4 O6

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

L28 ANSWER 8 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-22-2** REGISTRY

CN L-Serinamide, N-(6-amino-1-oxohexyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

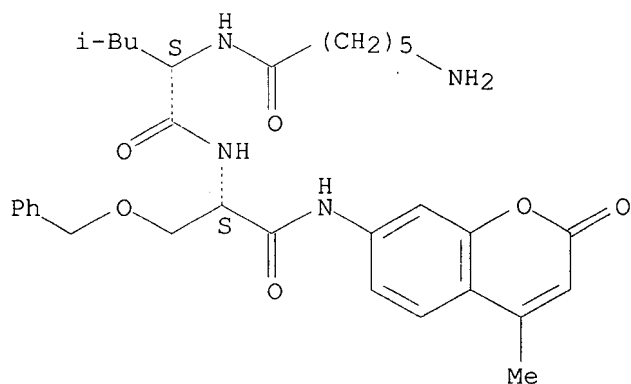
FS STEREOSEARCH

MF C32 H42 N4 O6

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

L28 ANSWER 9 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **178483-21-1** REGISTRY

CN L-Cysteinamide, N-(6-amino-1-oxohexyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-S-(phenylmethyl)- (9CI) (CA INDEX NAME)

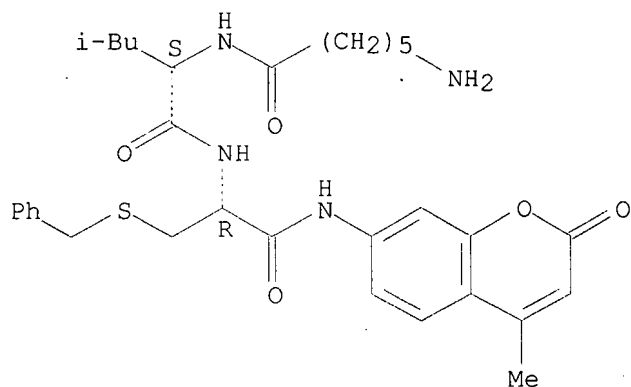
FS STEREOSEARCH

MF C32 H42 N4 O5 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:219280

REFERENCE 2: 127:30762

REFERENCE 3: 125:87172

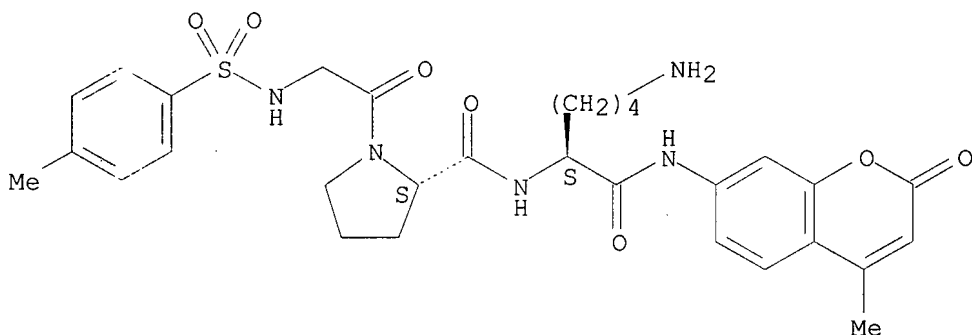
L28 ANSWER 10 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **128202-25-5** REGISTRY

CN L-Lysinamide, N-[(4-methylphenyl)sulfonyl]glycyl-L-prolyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH
 MF C30 H37 N5 O7 S
 SR CA
 LC STN Files: CA, CAPLUS, CHEMCATS

Absolute stereochemistry.

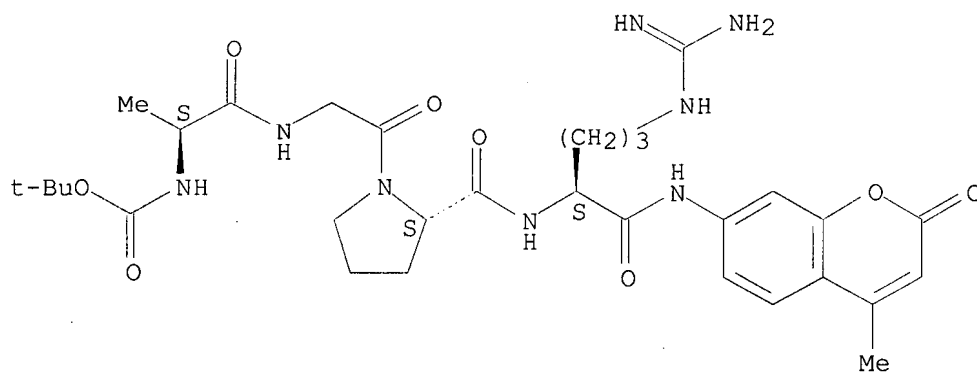


9 REFERENCES IN FILE CA (1967 TO DATE)
 9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:277974
 REFERENCE 2: 131:210810
 REFERENCE 3: 130:34966
 REFERENCE 4: 125:321395
 REFERENCE 5: 120:318212
 REFERENCE 6: 120:239044
 REFERENCE 7: 116:250834
 REFERENCE 8: 114:38356
 REFERENCE 9: 113:56354

L28 ANSWER 11 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN **118850-78-5** REGISTRY
 CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-alanylglycyl-L-prolyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 DR 127675-41-6
 MF C31 H44 N8 O8
 CI COM
 SR CA
 LC STN Files: CA, CAPLUS, CHEMCATS

Absolute stereochemistry.

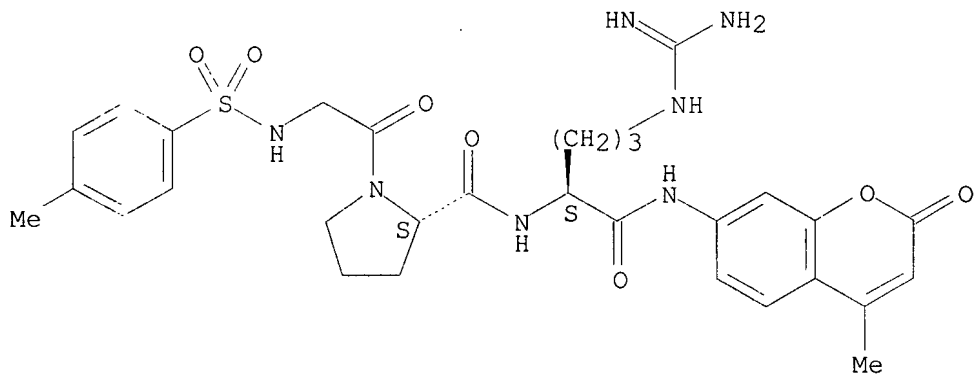


11 REFERENCES IN FILE CA (1967 TO DATE)
11 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:1561
REFERENCE 2: 131:319369
REFERENCE 3: 125:321395
REFERENCE 4: 125:215442
REFERENCE 5: 123:28413
REFERENCE 6: 119:176359
REFERENCE 7: 117:85790
REFERENCE 8: 116:123667
REFERENCE 9: 114:2515
REFERENCE 10: 113:20149

L28 ANSWER 12 OF 49 REGISTRY COPYRIGHT 2001 ACS
RN **117961-27-0** REGISTRY
CN L-Argininamide, N-[(4-methylphenyl)sulfonyl]glycyl-L-prolyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H37 N7 O7 S
CI COM
SR CAS Registry Services
LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, MEDLINE, TOXLINE, TOXLIT

Absolute stereochemistry.

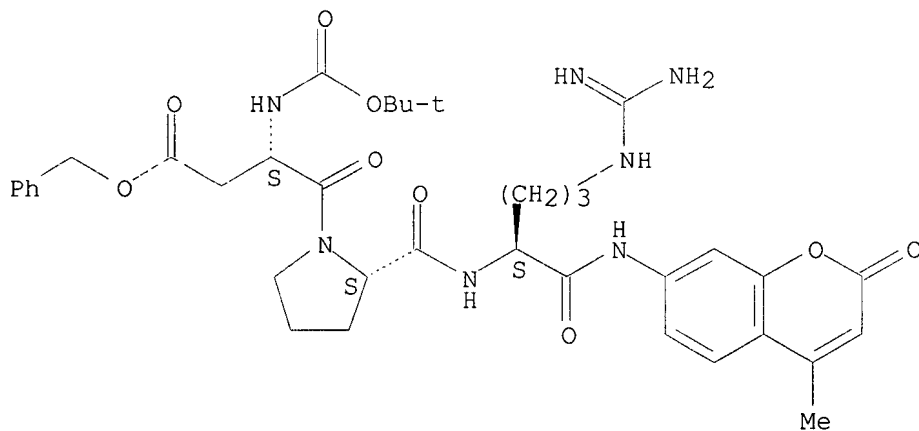


12 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:277974
REFERENCE 2: 131:210810
REFERENCE 3: 130:34966
REFERENCE 4: 125:321395
REFERENCE 5: 125:4092
REFERENCE 6: 120:318212
REFERENCE 7: 120:239044
REFERENCE 8: 114:180879
REFERENCE 9: 114:38356
REFERENCE 10: 113:145117

L28 ANSWER 13 OF 49 REGISTRY COPYRIGHT 2001 ACS
RN **113866-00-5** REGISTRY
CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-.alpha.-aspartyl-L-prolyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, phenylmethyl ester (9CI)
(CA INDEX NAME)
FS STEREOSEARCH
DR 127675-40-5
MF C37 H47 N7 O9
CI COM
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS

Absolute stereochemistry.



7 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:1561
REFERENCE 2: 131:70079
REFERENCE 3: 125:321395
REFERENCE 4: 116:123667
REFERENCE 5: 114:159530

REFERENCE 6: 113:20149

REFERENCE 7: 108:163875

L28 ANSWER 14 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 113712-08-6 REGISTRY

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

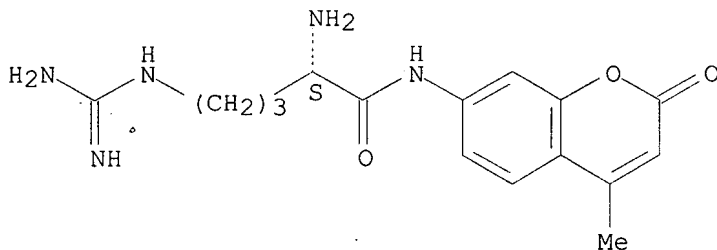
MF C16 H21 N5 O3 . 2 Cl H

SR CA

LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL

CRN (65286-27-3)

Absolute stereochemistry.



● 2 HCl

4 REFERENCES IN FILE CA (1967 TO DATE)

4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:227758

REFERENCE 2: 110:232106

REFERENCE 3: 109:110916

REFERENCE 4: 108:150983

L28 ANSWER 15 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 113711-87-8 REGISTRY

CN L-Argininamide, N2-[(phenylmethoxy)carbonyl]-D-arginylglycyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

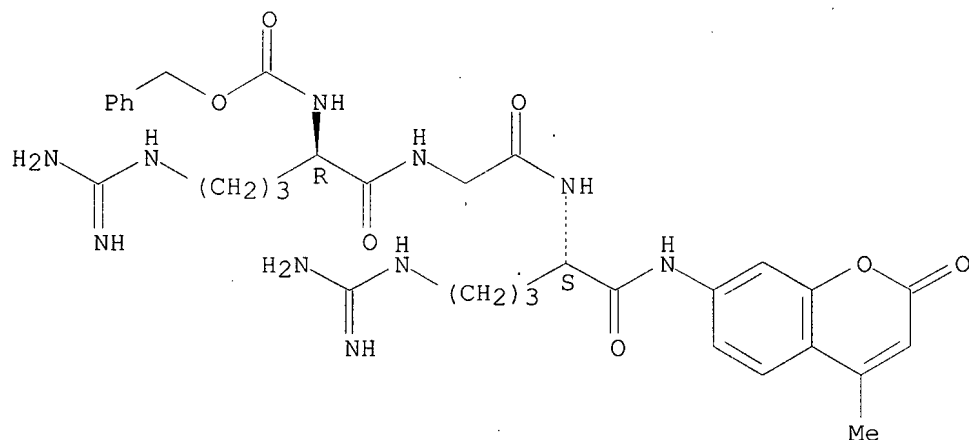
FS STEREOSEARCH

MF C32 H42 N10 O7 . 2 Cl H

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



• 2 HCl

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 110:232106

REFERENCE 2: 108:150983

L28 ANSWER 16 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 109358-48-7 REGISTRY

CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-lysyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

DR 127675-38-1

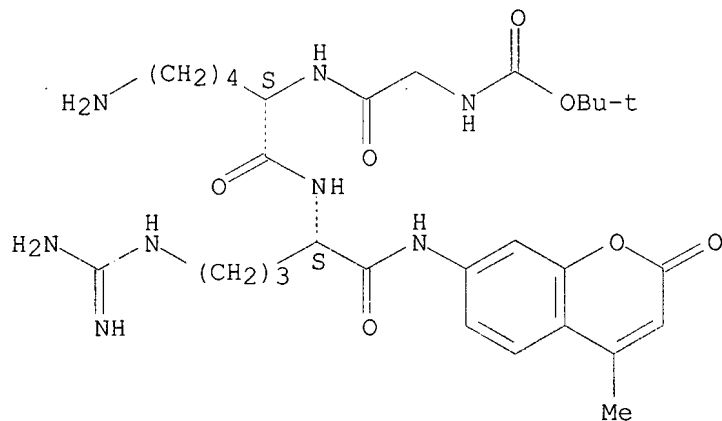
MF C29 H44 N8 O7

CI COM

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



12 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES IN FILE CAPLUS (1967 TO DATE)

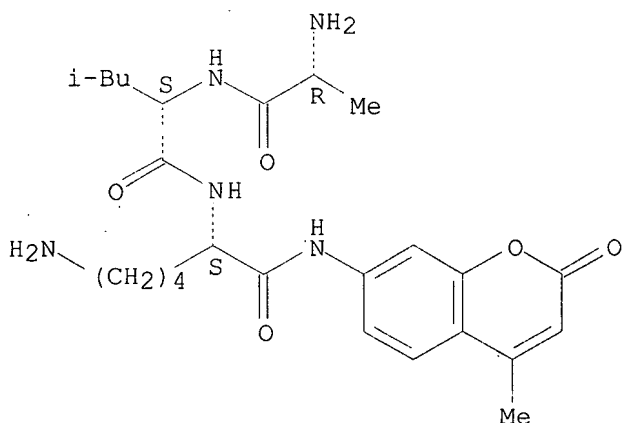
REFERENCE 1: 132:1561

REFERENCE 2: 131:319369

REFERENCE	3:	129:287232
REFERENCE	4:	125:136029
REFERENCE	5:	124:80395
REFERENCE	6:	121:102711
REFERENCE	7:	119:176359
REFERENCE	8:	117:207612
REFERENCE	9:	114:2515
REFERENCE	10:	113:20149

```
L28  ANSWER 17 OF 49  REGISTRY  COPYRIGHT 2001 ACS
RN    104881-72-3  REGISTRY
CN    L-Lysinamide, D-alanyl-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-
      (9CI)  (CA INDEX NAME)
FS    STEREOSEARCH
MF    C25 H37 N5 O5
SR    CA
LC    STN Files:   CA, CAPLUS, CHEMCATS, USPATFULL
```

Absolute stereochemistry.

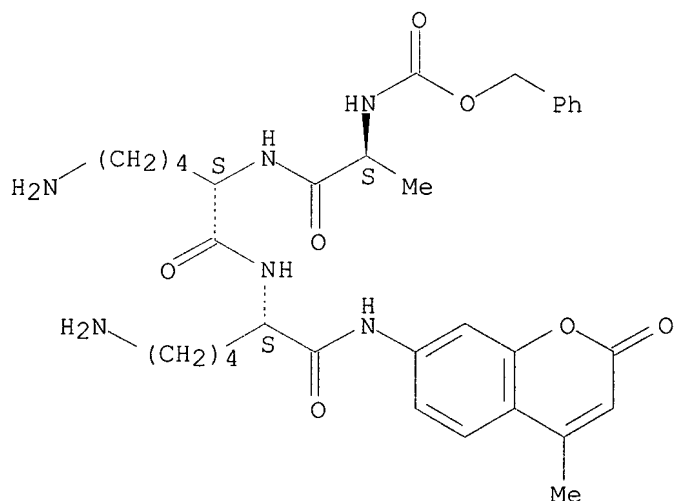


4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE	1:	129:40391
REFERENCE	2:	116:250833
REFERENCE	3:	106:171676
REFERENCE	4:	105:205177

```
L28  ANSWER 18 OF 49  REGISTRY  COPYRIGHT 2001 ACS
RN   104881-71-2  REGISTRY
CN   L-Lysinamide, N-[(phenylmethoxy)carbonyl]-L-alanyl-L-lysyl-N-(4-methyl-2-
     oxo-2H-1-benzopyran-7-yl)- (9CI)  (CA INDEX NAME)
FS   STEREOSEARCH
MF   C33 H44 N6 O7
SR   CA
LC   STN Files:    CA, CAPLUS
```

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:171676

REFERENCE 2: 105:205177

L28 ANSWER 19 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **104881-70-1** REGISTRY

CN L-Argininamide, D-seryl-L-prolyl-L-phenylalanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

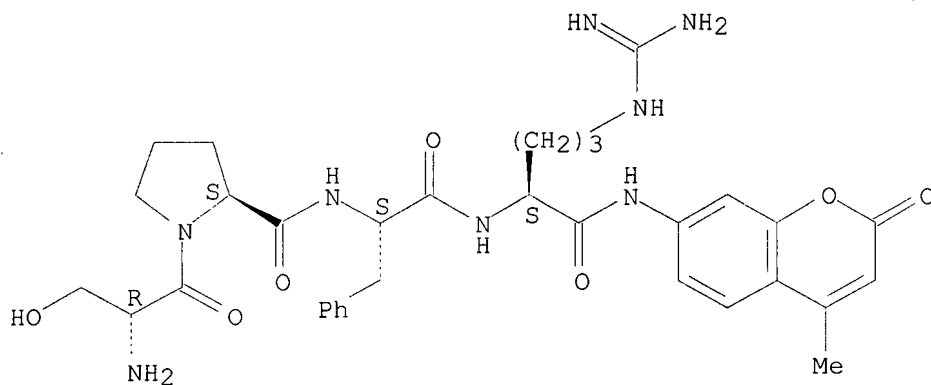
FS PROTEIN SEQUENCE; STEREOSEARCH

MF C33 H42 N8 O7

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:171676

REFERENCE 2: 105:205177

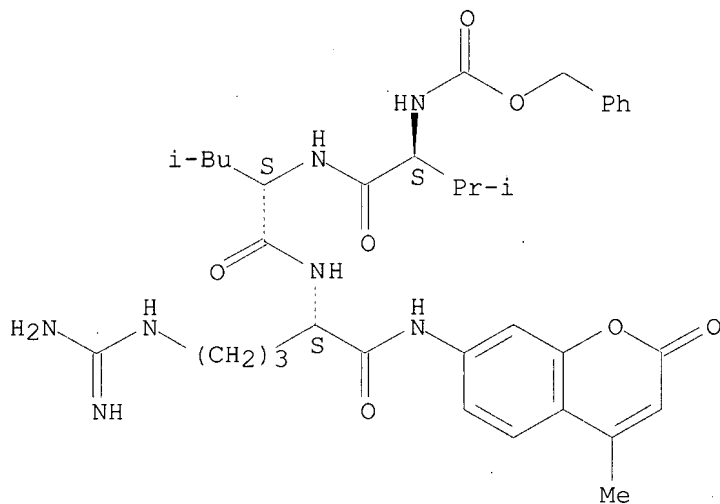
L28 ANSWER 20 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **104881-69-8** REGISTRY

CN L-Argininamide, N-[(phenylmethoxy)carbonyl]-L-valyl-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH
MF C35 H47 N7 O7
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:277974
REFERENCE 2: 119:103307
REFERENCE 3: 114:159574
REFERENCE 4: 111:129576
REFERENCE 5: 105:205177

L28 ANSWER 21 OF 49 REGISTRY COPYRIGHT 2001 ACS
RN **104881-68-7** REGISTRY
CN L-Argininamide, N-[(phenylmethoxy)carbonyl]-L-alanyl-L-lysyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C33 H44 N8 O7
CI COM
SR CA
LC STN Files: CA, CAPLUS

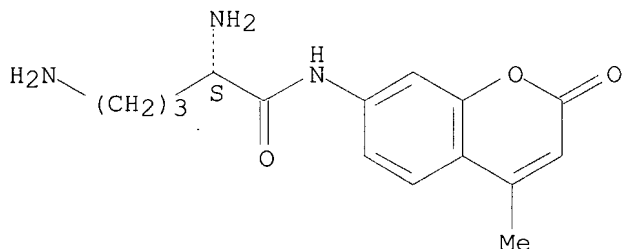
Absolute stereochemistry.

CC1=C(C(=O)OCC[C@H](N)C(=O)Nc2ccc3c(c2)oc(=O)c3)c4ccccc14

RN 98516-75-7 REGISTRY

CN Pentanamide, 2,5-diamino-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, (S)-
 (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C15 H19 N3 O3
 CI COM
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:234081

REFERENCE 2: 113:37409

REFERENCE 3: 103:137525

L28 ANSWER 24 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 98516-74-6 REGISTRY

CN Pentanamide, 2-amino-3-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
 (2S,3S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pentanamide, 2-amino-3-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
 [S-(R*,R*)]-

FS STEREOSEARCH

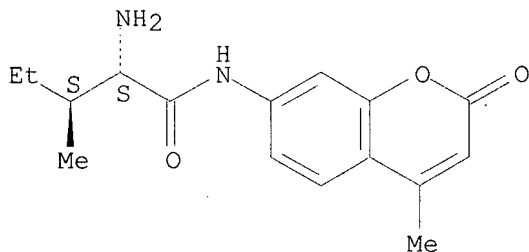
MF C16 H20 N2 O3

CI COM

SR CA

LC STN Files: CA, CAPLUS, CHEMCATS, TOXLIT, USPATFULL

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1967 TO DATE)
 5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:147828

REFERENCE 2: 130:222388

REFERENCE 3: 129:40391

REFERENCE 4: 113:37409

REFERENCE 5: 103:137525

L28 ANSWER 25 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **98516-73-5** REGISTRY

CN Propanamide, 2-amino-3-hydroxy-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
(2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Propanamide, 2-amino-3-hydroxy-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
(S)-

FS STEREOSEARCH

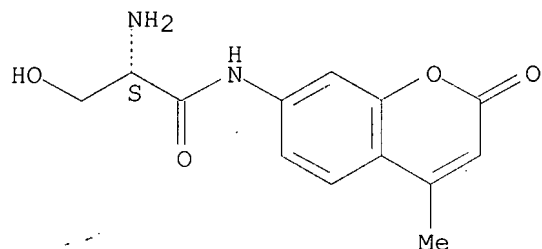
MF C13 H14 N2 O4

CI COM

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1967 TO DATE)

5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:222388

REFERENCE 2: 127:105866

REFERENCE 3: 114:182427

REFERENCE 4: 113:37409

REFERENCE 5: 103:137525

L28 ANSWER 26 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **94367-34-7** REGISTRY

CN Butanamide, 2-amino-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-4-(methylthio)-,
(2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Butanamide, 2-amino-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-4-(methylthio)-,
(S)-

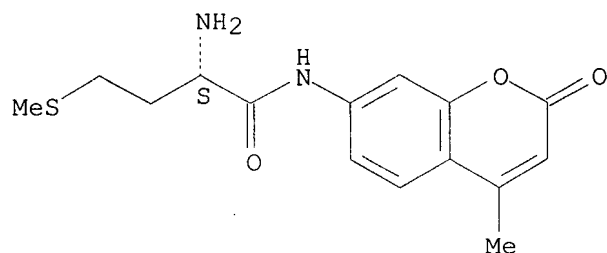
FS STEREOSEARCH

MF C15 H18 N2 O3 S

CI COM

LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.



6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:147828
REFERENCE 2: 130:222388
REFERENCE 3: 129:51193
REFERENCE 4: 114:182427
REFERENCE 5: 113:37409
REFERENCE 6: 103:137525

L28 ANSWER 27 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **94367-21-2** REGISTRY

CN L-Tyrosinamide, N-(3-carboxy-1-oxopropyl)-L-leucyl-L-leucyl-L-valyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

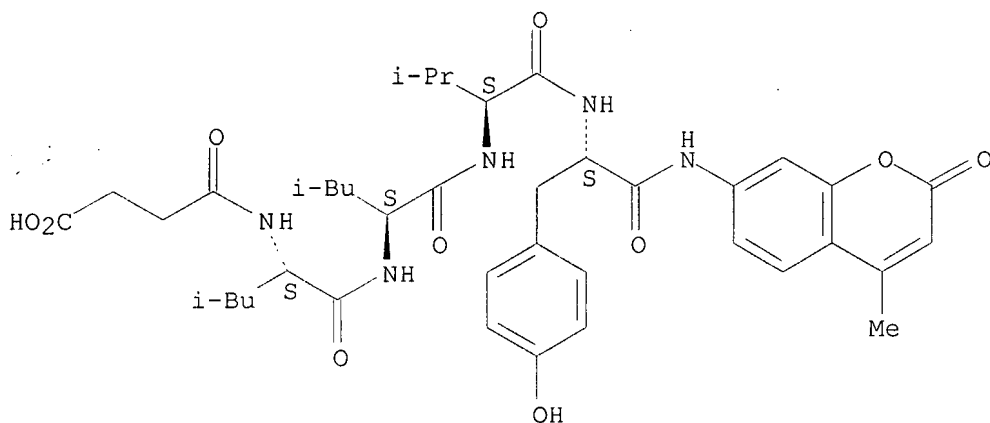
FS PROTEIN SEQUENCE; STEREOSEARCH

DR 216961-41-0

MF C40 H53 N5 O10

LC STN Files: CA, CANCERLIT, CAPLUS, CHEMCATS, CSCHEM, MEDLINE, TOXLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



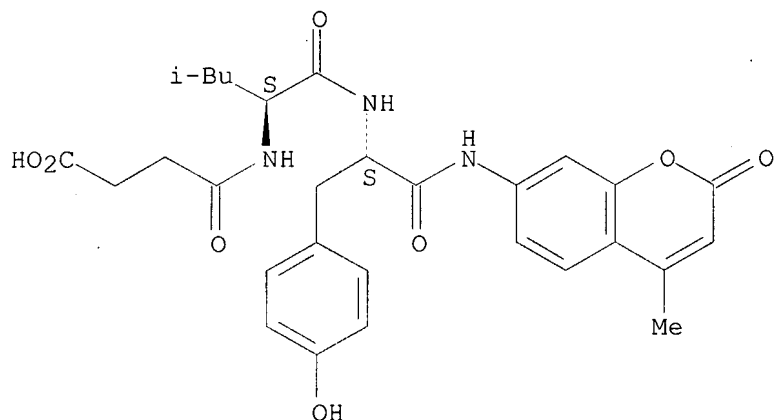
53 REFERENCES IN FILE CA (1967 TO DATE)
53 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:233611
REFERENCE 2: 133:277974
REFERENCE 3: 133:172160
REFERENCE 4: 132:303476
REFERENCE 5: 132:261967
REFERENCE 6: 131:239629
REFERENCE 7: 130:57161
REFERENCE 8: 130:22084
REFERENCE 9: 129:51224

REFERENCE 10: 127:92166

L28 ANSWER 28 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN **94367-20-1** REGISTRY
 CN L-Tyrosinamide, N-(3-carboxy-1-oxopropyl)-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C29 H33 N3 O8
 LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, MEDLINE, TOXLIT, USPATFULL

Absolute stereochemistry.

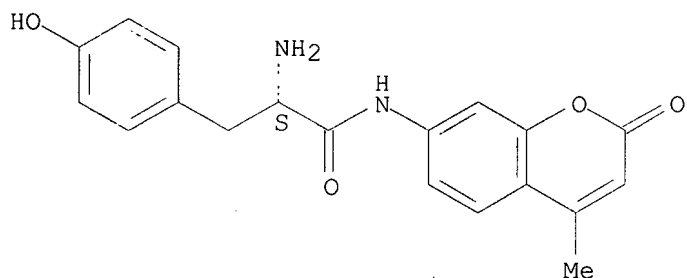


15 REFERENCES IN FILE CA (1967 TO DATE)
 15 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:248056
 REFERENCE 2: 133:277974
 REFERENCE 3: 132:304311
 REFERENCE 4: 131:319369
 REFERENCE 5: 125:4092
 REFERENCE 6: 124:80395
 REFERENCE 7: 119:154654
 REFERENCE 8: 115:24910
 REFERENCE 9: 113:128517
 REFERENCE 10: 113:2428

L28 ANSWER 29 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN **94099-57-7** REGISTRY
 CN Benzenepropanamide, .alpha.-amino-4-hydroxy-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, (.alpha.S)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzenepropanamide, .alpha.-amino-4-hydroxy-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, (S)-
 FS STEREOSEARCH
 MF C19 H18 N2 O4
 CI COM
 LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, TOXLIT, USPATFULL

Absolute stereochemistry.



10 REFERENCES IN FILE CA (1967 TO DATE)
10 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:2075
REFERENCE 2: 130:222388
REFERENCE 3: 129:51193
REFERENCE 4: 129:40391
REFERENCE 5: 127:105866
REFERENCE 6: 117:45159
REFERENCE 7: 113:37409
REFERENCE 8: 105:40975
REFERENCE 9: 103:137525
REFERENCE 10: 102:40245

L28 ANSWER 30 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **90468-18-1** REGISTRY

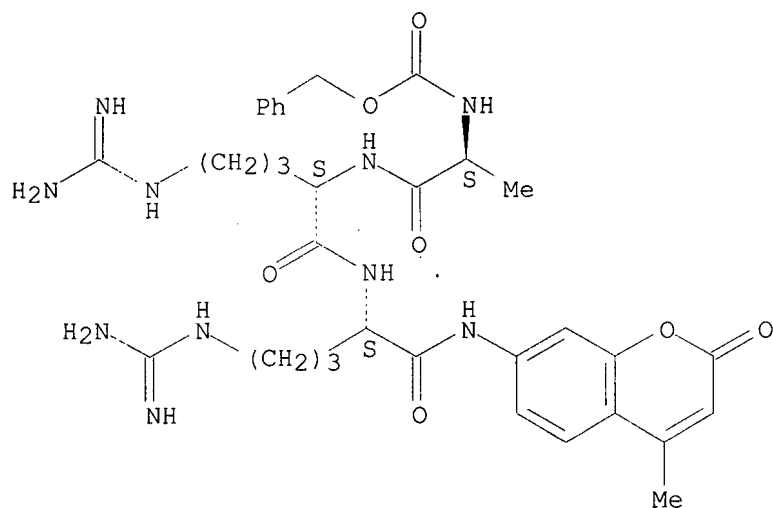
CN L-Argininamide, N-[(phenylmethoxy)carbonyl]-L-alanyl-L-arginyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H44 N10 O7

LC STN Files: CA, CAPLUS, CHEMCATS

Absolute stereochemistry.



12 REFERENCES IN FILE CA (1967 TO DATE)

12 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:319369
REFERENCE 2: 131:210810
REFERENCE 3: 130:22084
REFERENCE 4: 117:207612
REFERENCE 5: 115:24834
REFERENCE 6: 110:227492
REFERENCE 7: 110:3334
REFERENCE 8: 107:92415
REFERENCE 9: 106:171676
REFERENCE 10: 105:205185

L28 ANSWER 31 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 78682-66-3 REGISTRY

CN Butanamide, 2-amino-3-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
(2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Butanamide, 2-amino-3-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
(S)-

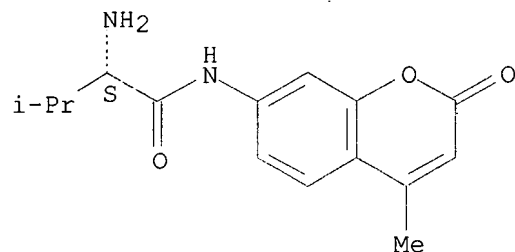
FS STEREOSEARCH

MF C15 H18 N2 O3

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, TOXLIT

Absolute stereochemistry.



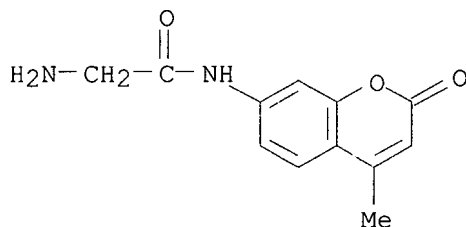
9 REFERENCES IN FILE CA (1967 TO DATE)

9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:147828
REFERENCE 2: 134:52979
REFERENCE 3: 130:222388
REFERENCE 4: 127:105866
REFERENCE 5: 122:155727
REFERENCE 6: 113:37409
REFERENCE 7: 110:169049
REFERENCE 8: 103:137525

REFERENCE 9: 95:110802

L28 ANSWER 32 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN 77471-42-2 REGISTRY
 CN Acetamide, 2-amino-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C12 H12 N2 O3
 CI COM
 LC STN Files: CA, CAPLUS, TOXLIT



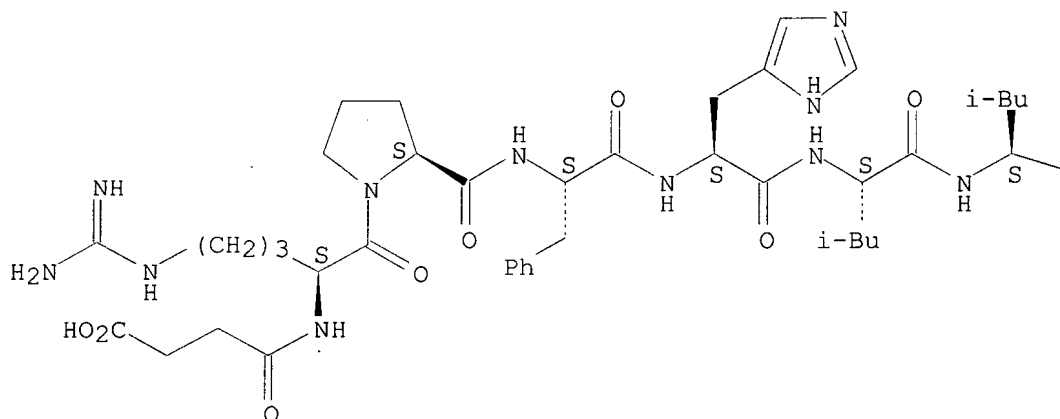
9 REFERENCES IN FILE CA (1967 TO DATE)
 9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:147828
 REFERENCE 2: 131:319369
 REFERENCE 3: 130:222388
 REFERENCE 4: 129:51193
 REFERENCE 5: 122:155727
 REFERENCE 6: 119:203862
 REFERENCE 7: 113:37409
 REFERENCE 8: 103:137525
 REFERENCE 9: 94:187496

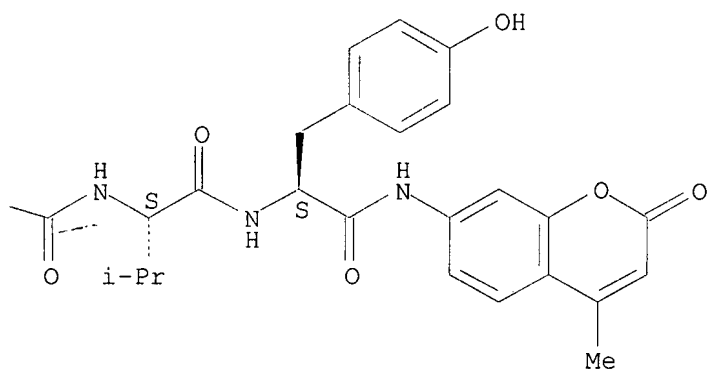
L28 ANSWER 33 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN 76524-84-0 REGISTRY
 CN L-Tyrosinamide, N2-(3-carboxy-1-oxopropyl)-L-arginyl-L-prolyl-L-phenylalanyl-L-histidyl-L-leucyl-L-leucyl-L-valyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE; STEREOSEARCH
 MF C66 H88 N14 O14
 LC STN Files: CA, CAPLUS, CHEMCATS, CSCHM

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:34903

REFERENCE 2: 126:168803

REFERENCE 3: 124:80395

REFERENCE 4: 103:33998

REFERENCE 5: 99:208472

REFERENCE 6: 94:79045

L28 ANSWER 34 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 73554-95-7 REGISTRY

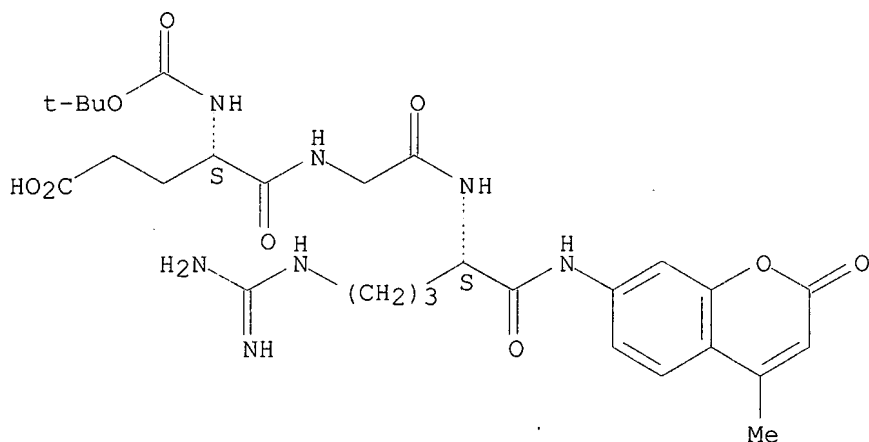
CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-.alpha.-glutamylglycyl-
N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H39 N7 O9

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:80395

REFERENCE 2: 108:163875

REFERENCE 3: 92:193362

L28 ANSWER 35 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 73554-93-5 REGISTRY

CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl-L-seryl-L-threonyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

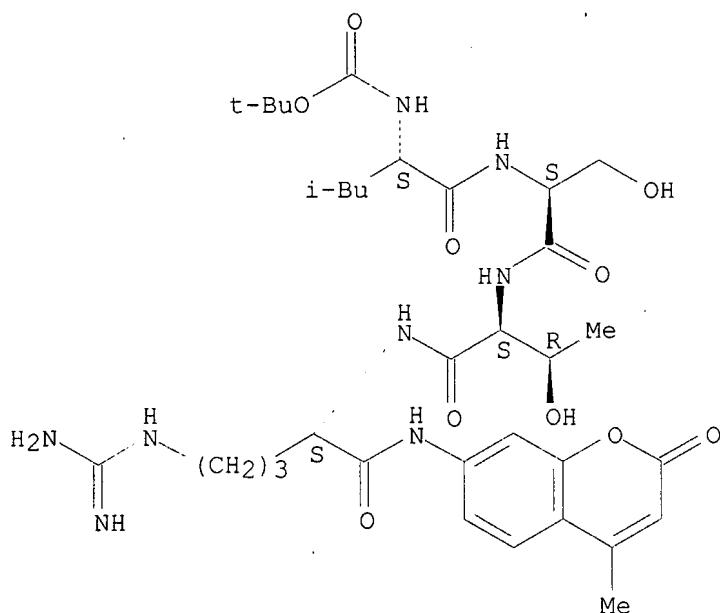
DR 127675-42-7

MF C34 H52 N8 O10

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, MEDLINE, USPATFULL

Absolute stereochemistry.



18 REFERENCES IN FILE CA (1967 TO DATE)

18 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:1561
 REFERENCE 2: 119:176359
 REFERENCE 3: 117:85790
 REFERENCE 4: 113:130009
 REFERENCE 5: 113:56354
 REFERENCE 6: 113:20149
 REFERENCE 7: 112:51116
 REFERENCE 8: 111:227668
 REFERENCE 9: 111:149265
 REFERENCE 10: 110:53528

L28 ANSWER 36 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 73554-90-2 REGISTRY

CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanyl-L-seryl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

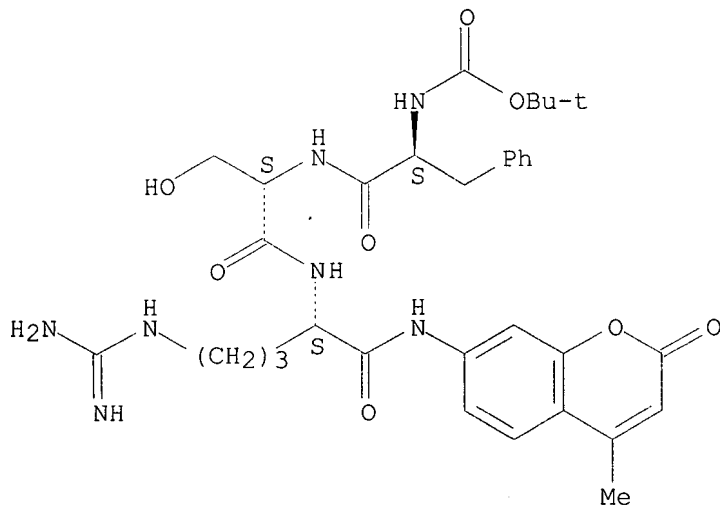
FS STEREOSEARCH

MF C33 H43 N7 O8

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, MEDLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



34 REFERENCES IN FILE CA (1967 TO DATE)

34 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:346302
 REFERENCE 2: 133:234461
 REFERENCE 3: 132:1561
 REFERENCE 4: 131:210810
 REFERENCE 5: 127:46906

REFERENCE 6: 124:80395
 REFERENCE 7: 119:176359
 REFERENCE 8: 117:207612
 REFERENCE 9: 117:206060
 REFERENCE 10: 116:150015

L28 ANSWER 37 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 73554-84-4 REGISTRY

CN L-Lysinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-valyl-L-leucyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN tert-(Butyloxycarbonyl)-L-valyl-L-leucyl-L-lysine-7-amino-4-methylcoumarin

FS STEREOSEARCH

MF C32 H49 N5 O7

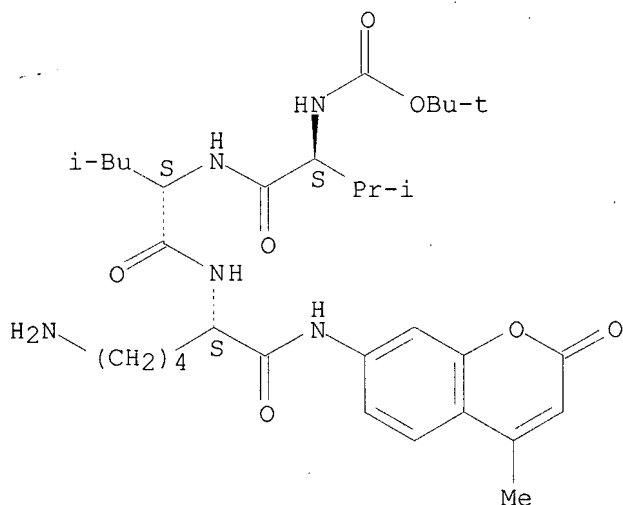
CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, MEDLINE, TOXLINE, USPATFULL

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



37 REFERENCES IN FILE CA (1967 TO DATE)
 37 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:189890
 REFERENCE 2: 133:277974
 REFERENCE 3: 133:27885
 REFERENCE 4: 132:1561
 REFERENCE 5: 131:319369
 REFERENCE 6: 129:40391
 REFERENCE 7: 125:136029
 REFERENCE 8: 125:108864

REFERENCE 9: 125:4092

REFERENCE 10: 124:169185

L28 ANSWER 38 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 73207-91-7 REGISTRY

CN L-Lysinamide, N-(3-carboxy-1-oxopropyl)-L-alanyl-L-phenylalanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

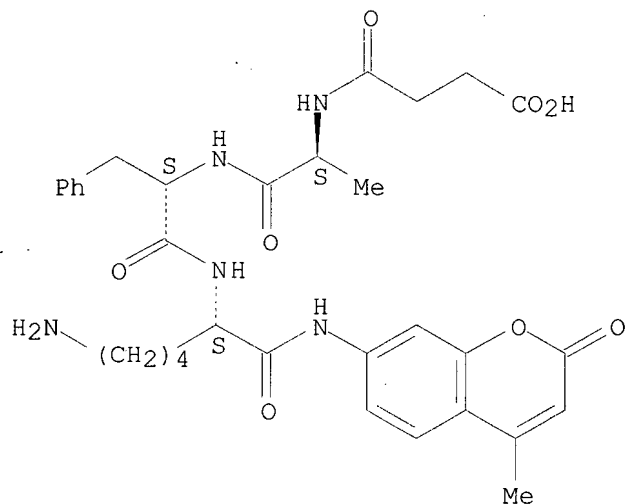
FS STEREOSEARCH

MF C32 H39 N5 O8

CI COM

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



9 REFERENCES IN FILE CA (1967 TO DATE)

9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:233128

REFERENCE 2: 116:168897

REFERENCE 3: 114:159541

REFERENCE 4: 113:130009

REFERENCE 5: 113:128517

REFERENCE 6: 113:2428

REFERENCE 7: 111:149265

REFERENCE 8: 102:58187

REFERENCE 9: 100:116894

L28 ANSWER 39 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 71973-79-0 REGISTRY

CN L-Phenylalaninamide, N-(3-carboxy-1-oxopropyl)-L-alanyl-L-alanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

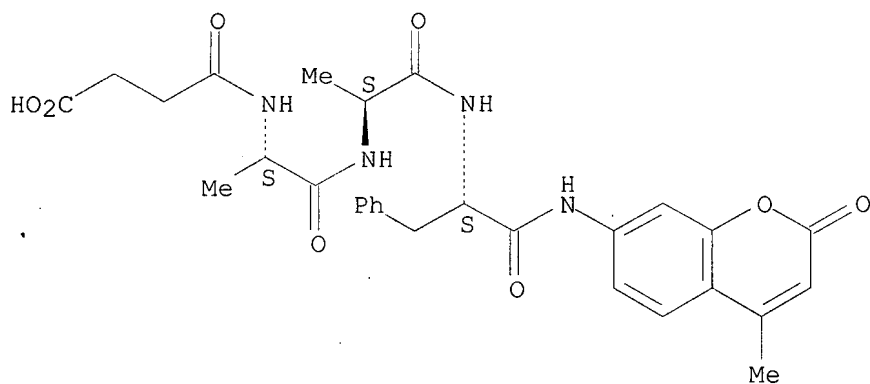
DR 161851-19-0

MF C29 H32 N4 O8

LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM

Absolute stereochemistry.

09/866/32



17 REFERENCES IN FILE CA (1967 TO DATE)
17 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:261967

REFERENCE 2: 126:327433

REFERENCE 3: 126:28317

REFERENCE 4: 124:80395

REFERENCE 5: 122:208172

REFERENCE 6: 119:154654

REFERENCE 7: 116:123667

REFERENCE 8: 114:159541

REFERENCE 9: 113:54861

REFERENCE 10: 113:36823

L28 ANSWER 40 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 70996-06-4 REGISTRY

CN L-Phenylalaninamide, N-(4-carboxy-1-oxobutyl)glycylglycyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

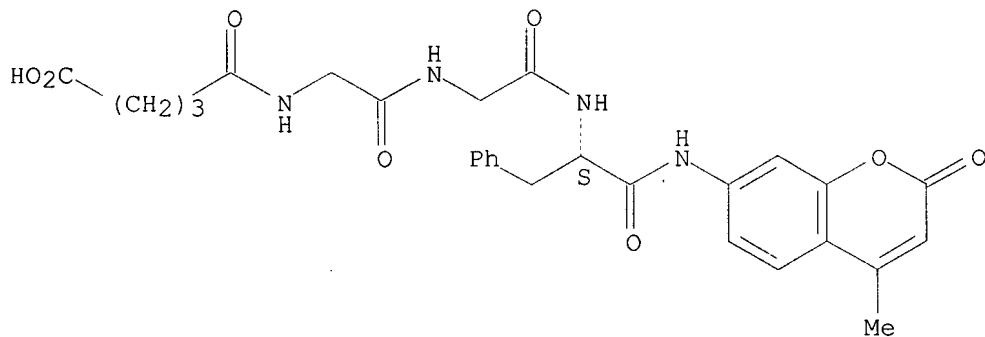
DR 210168-66-4

MF C28 H30 N4 O8

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, IFICDB, IFIPAT, IFIUDB, USPATFULL

Absolute stereochemistry.



6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:319369
REFERENCE 2: 129:40391
REFERENCE 3: 124:80395
REFERENCE 4: 109:106883
REFERENCE 5: 99:84180
REFERENCE 6: 91:70917

L28 ANSWER 41 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **66447-31-2** REGISTRY

CN Pentanamide, 2-amino-4-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
(2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pentanamide, 2-amino-4-methyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-,
(S)-

OTHER NAMES:

CN L-Leucine 4-methylcoumaryl-7-amide

FS STEREOSEARCH

DR 136466-29-0, 136710-20-8

MF C16 H20 N2 O3

CI COM

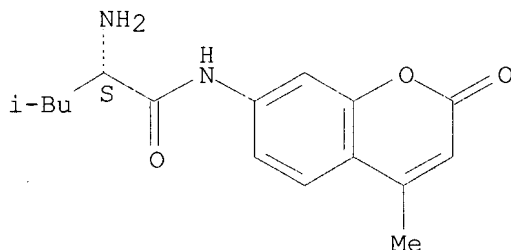
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, MEDLINE,
MSDS-OHS, TOXLIT, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



52 REFERENCES IN FILE CA (1967 TO DATE)
52 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:242274
REFERENCE 2: 134:147828
REFERENCE 3: 132:163114
REFERENCE 4: 131:319369
REFERENCE 5: 130:222388
REFERENCE 6: 129:51193
REFERENCE 7: 129:40391
REFERENCE 8: 127:298403

REFERENCE 9: 127:180654

REFERENCE 10: 127:105866

L28 ANSWER 42 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **66216-78-2** REGISTRY

CN L-Argininamide, N-[(phenylmethoxy)carbonyl]glycylglycyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

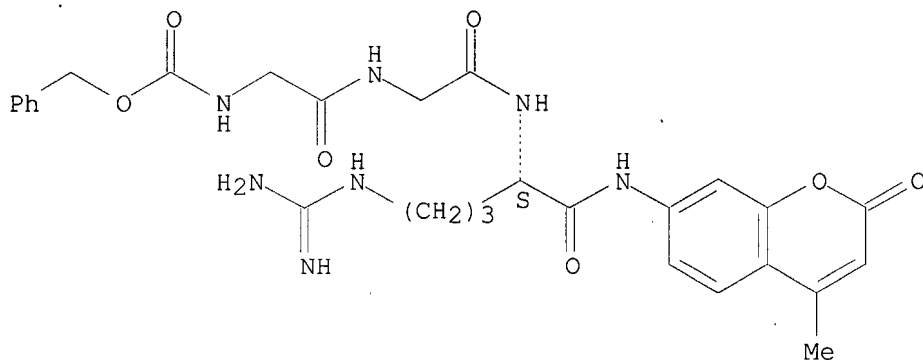
FS STEREOSEARCH

MF C28 H33 N7 O7

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, MEDLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



21 REFERENCES IN FILE CA (1967 TO DATE)

21 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:116511

REFERENCE 2: 131:319369

REFERENCE 3: 130:48978

REFERENCE 4: 129:4837

REFERENCE 5: 127:278441

REFERENCE 6: 126:238648

REFERENCE 7: 124:233128

REFERENCE 8: 116:123667

REFERENCE 9: 115:24834

REFERENCE 10: 113:186959

L28 ANSWER 43 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **65452-02-0** REGISTRY

CN Benzamide, N-[(1S)-4-[(aminoiminomethyl)amino]-1-[[4-methyl-2-oxo-2H-1-benzopyran-7-yl)amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzamide, N-[4-[(aminoiminomethyl)amino]-1-[[4-methyl-2-oxo-2H-1-benzopyran-7-yl)amino]carbonyl]butyl]-, (S)-

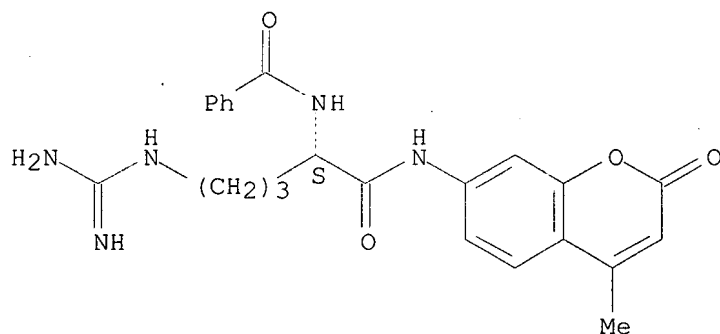
FS STEREOSEARCH

MF C23 H25 N5 O4

CI COM

LC STN Files: CA, CAPLUS, TOXLIT, USPATFULL

Absolute stereochemistry.



30 REFERENCES IN FILE CA (1967 TO DATE)
30 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:307102
REFERENCE 2: 130:121266
REFERENCE 3: 129:40391
REFERENCE 4: 125:136029
REFERENCE 5: 125:4092
REFERENCE 6: 122:234081
REFERENCE 7: 121:102711
REFERENCE 8: 119:176359
REFERENCE 9: 118:18414
REFERENCE 10: 116:123667

L28 ANSWER 44 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 65286-27-3 REGISTRY

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, (2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-, (S)-

OTHER NAMES:

CN L-Arginine 4-methylcoumaryl-7-amide

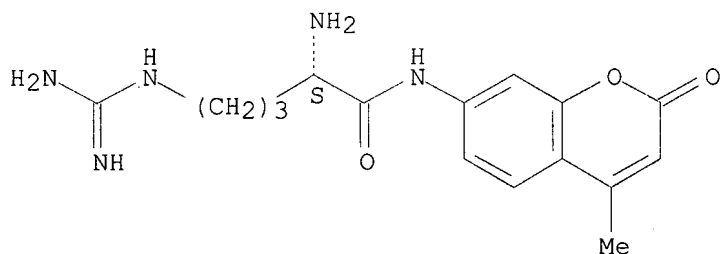
FS STEREOSEARCH

MF C16 H21 N5 O3

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, MEDLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



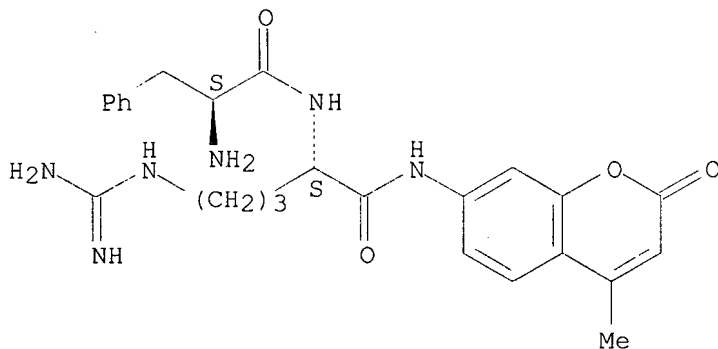
52 REFERENCES IN FILE CA (1967 TO DATE)

52 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:319369
 REFERENCE 2: 130:222388
 REFERENCE 3: 129:51193
 REFERENCE 4: 127:105866
 REFERENCE 5: 126:313943
 REFERENCE 6: 125:136029
 REFERENCE 7: 124:169185
 REFERENCE 8: 124:80238
 REFERENCE 9: 122:259506
 REFERENCE 10: 122:234081

L28 ANSWER 45 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN 65147-23-1 REGISTRY
 CN L-Argininamide, L-phenylalanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-
 (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C25 H30 N6 O4
 CI COM
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:29254
 REFERENCE 2: 92:193362
 REFERENCE 3: 88:17933

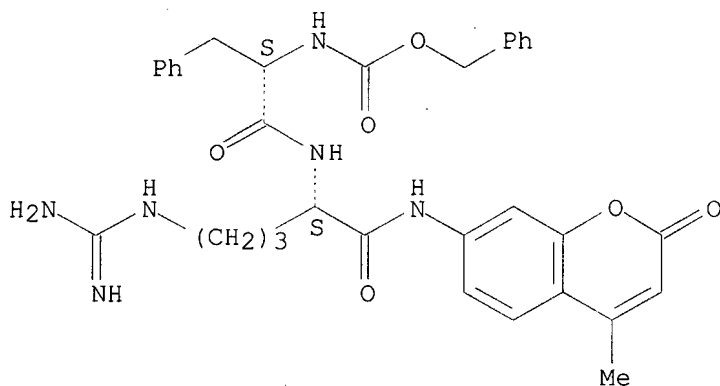
L28 ANSWER 46 OF 49 REGISTRY COPYRIGHT 2001 ACS
 RN 65147-22-0 REGISTRY
 CN L-Argininamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 3095V
 CN Carbobenzoxy-L-phenylalanyl-L-arginine-4-methylcoumaryl-7-amide
 FS STEREOSEARCH
 DR 87367-10-0, 117766-12-8

MF C33 H36 N6 O6

CI COM

LC STN Files: CA, CANCERLIT, CAPLUS, CHEMCATS, MEDLINE, MSDS-OHS, TOXLIT, USPATFULL

Absolute stereochemistry.



141 REFERENCES IN FILE CA (1967 TO DATE)

141 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:307040

REFERENCE 2: 134:291943

REFERENCE 3: 134:248056

REFERENCE 4: 133:360452

REFERENCE 5: 133:277974

REFERENCE 6: 133:219280

REFERENCE 7: 133:219212

REFERENCE 8: 133:39880

REFERENCE 9: 133:27917

REFERENCE 10: 133:27885

L28 ANSWER 47 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN 65147-21-9 REGISTRY

CN L-Argininamide, L-prolyl-L-phenylalanyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3096V

CN L-Prolyl-L-phenylalanyl-L-arginine-4-methylcoumaryl-7-amide

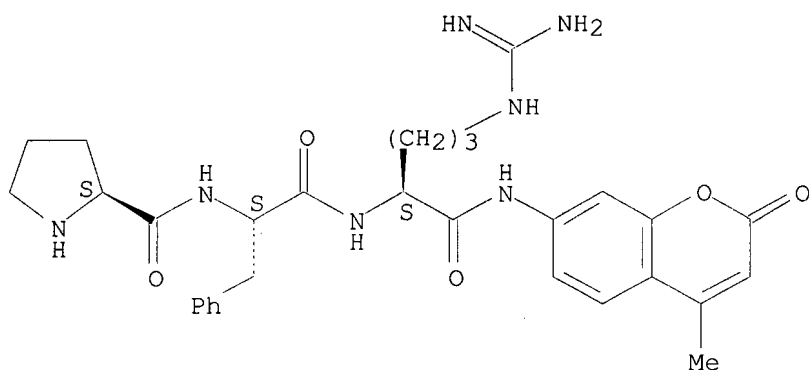
FS STEREOSEARCH

MF C30 H37 N7 O5

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, MEDLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



68 REFERENCES IN FILE CA (1967 TO DATE)
68 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:168343
REFERENCE 2: 131:307102
REFERENCE 3: 131:210810
REFERENCE 4: 129:40391
REFERENCE 5: 129:37893
REFERENCE 6: 128:318648
REFERENCE 7: 127:244667
REFERENCE 8: 125:215442
REFERENCE 9: 125:4092
REFERENCE 10: 124:80395

L28 ANSWER 48 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **65147-06-0** REGISTRY

CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-isoleucyl-L-.alpha.-glutamylglycyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3094V

FS PROTEIN SEQUENCE; STEREOSEARCH

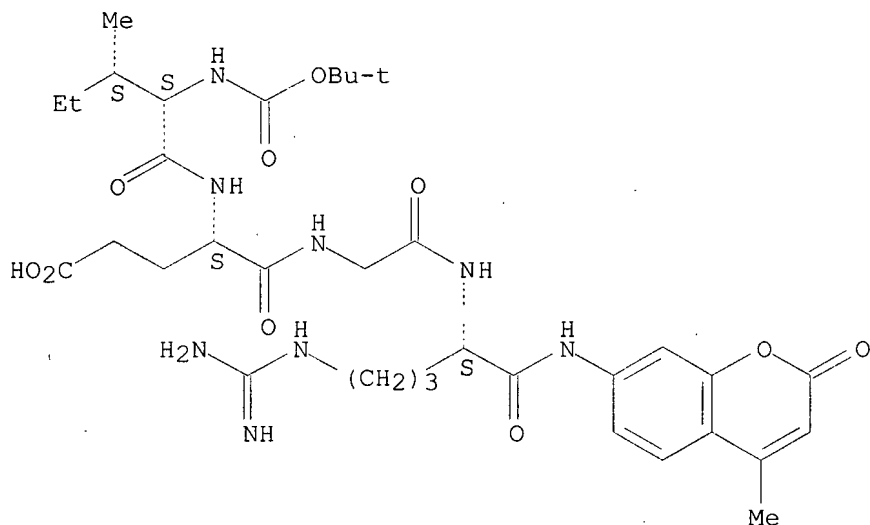
DR 127675-43-8

MF C34 H50 N8 O10

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, MEDLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



20 REFERENCES IN FILE CA (1967 TO DATE)
20 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:1561
REFERENCE 2: 119:176359
REFERENCE 3: 117:137612
REFERENCE 4: 116:123667
REFERENCE 5: 115:250738
REFERENCE 6: 115:24834
REFERENCE 7: 114:2515
REFERENCE 8: 113:130009
REFERENCE 9: 113:20149
REFERENCE 10: 111:227668

L28 ANSWER 49 OF 49 REGISTRY COPYRIGHT 2001 ACS

RN **65147-04-8** REGISTRY

CN L-Argininamide, N-[(1,1-dimethylethoxy)carbonyl]-L-valyl-L-prolyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3093V

FS STEREOSEARCH

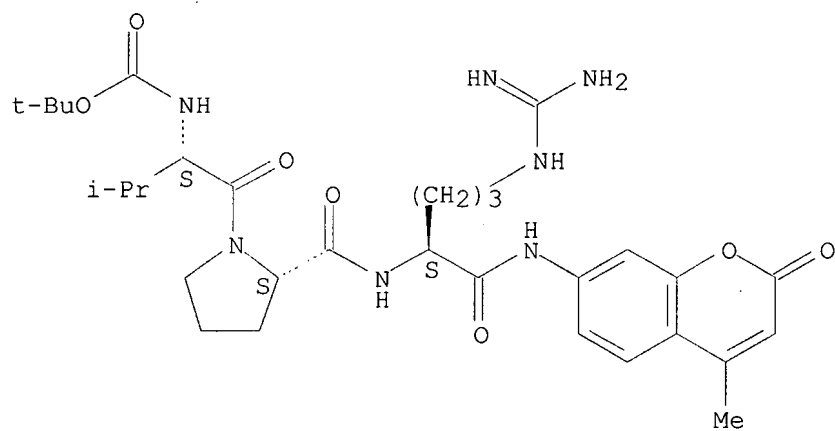
DR 127675-39-2

MF C31 H45 N7 O7

CI COM

LC STN Files: CA, CANCERLIT, CAPLUS, CHEMCATS, MEDLINE, TOXLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



65 REFERENCES IN FILE CA (1967 TO DATE)
65 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:1561
REFERENCE 2: 131:319369
REFERENCE 3: 131:298140
REFERENCE 4: 131:210810
REFERENCE 5: 131:70079
REFERENCE 6: 130:263129
REFERENCE 7: 130:114914
REFERENCE 8: 129:313090
REFERENCE 9: 129:287232
REFERENCE 10: 125:321395